Smithsonian

Submitted to the Committees on Appropriations
Congress of the United States

Smithsonian Institution

Fiscal Year 2001
Budget Request to Congress

February 2000

Smithsonian Institution
Fiscal Year 2001 Budget Request To Congress
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THE YEAR IN REVIEW

Unique within the Federal establishment, the Smithsonian Institution is a charitable trust with a statutory charter. The Smithsonian—created by the Government, yet without a governing function—has a story that brings together more than a century and a half of the Nation's history and the standards imposed by law on managers of charitable trusts. Those standards guide every Institutional activity, be it interaction with Congress, management of resources, or relationships with the myriad constituencies that are the ultimate beneficiaries of the Trust.

On October 23, 1826, James Smithson, an English man of science who had never visited the United States, drew up his will. Near its end, he described a residual bequest, framed it by identifying a trustee and beneficiaries, and outlined its purposes:

> *...to the United States of America, to found at Washington, under the name of the Smithsonian Institution, an establishment for the increase and diffusion of knowledge...*

In 1829, Smithson died, as did his heir six years later. His property then passed to the United States which, in the Act of July 1, 1836, accepted the bequest. The Act of August 10, 1846 incorporated the language of the will, established the Institution, and delegated to a Board of Regents the obligation of the United States as trustee for management of the Trust independent of the Government.

During the years that followed, Mr. Smithson's idea has become the world's largest museum, education, and research complex, pre-eminent in astrophysics, tropical and environmental biology, the history of science, art history, aeronautics and space science, natural history, anthropology, and materials conservation.

The Smithsonian Institution today includes 16 museums and galleries and the National Zoological Park that together received over 35 million visits this past year. Its traveling exhibitions and website—*www.si.edu*—have attracted millions more visitors through their gateways to new worlds of information transmission and sharing. The collections that form the basis for the knowledge that Mr. Smithson sought to increase and diffuse contain more than 141 million objects, works of art, and specimens from nature, 122 million of which are in the National Museum of Natural History. The Institution also holds over 139 million archival and library documents. The Smithsonian conducts research in its museums, at specialized facilities in

eight states and the Republic of Panama, and at field sites around the world.

The most familiar products of Smithsonian research are its exhibitions. Specific examples of such exhibitions are the recently-opened *African Voices* exhibition and the *Forces of Change* project at the National Museum of Natural History. *African Voices* examines the diversity, dynamism, and global influence of Africa's peoples and cultures within the realms of family, work, community and the natural environment. It draws on the museum's vast collections, as well as commissioned sculptures, textiles, and pottery. *Forces of Change* will examine the science and dynamics of global change through publications, computer products, public programs, and a 6,500-square-foot exhibition. At the National Zoological Park, the new *American Prairie* exhibition opened in 1999, featuring bison, prairie dogs, native grasses, and an interpretive program on grassland biology and the culture and challenges of human life on the prairie.

Another aspect of Institutional research is reflected in the Chandra X-ray Observatory, which carries a high-resolution camera built by the Smithsonian Astrophysical Observatory. Chandra was launched aboard the Space Shuttle July 23, 1999, on a five-year mission expected to produce unprecedented images of a host of objects, ranging from comets in our own solar system to quasars at the very edge of the observable universe. SAO is also the site of the Chandra X-ray Science Center, which receives, analyzes, and archives data from the telescope and makes them available to the world's astronomical community. This is the first space science mission of such magnitude to be operated by a non-NASA center.

In the context of the fundamental scientific questions posed by the tropics, the opening of the new marine research station at Bocas del Toro in western Panama has made accessible for study a spectacular array of tropical coastal habitats. Scientists at the Smithsonian Tropical Research Institute have underway basic research programs, baseline biological surveys, and monitoring of coral reefs, sea grass, and mangrove systems.

At the National Air and Space Museum, the gondola from the Breitling Orbiter 3, which in 1999 became the first balloon to complete a nonstop flight around the world, was added to the *Milestones of Flight* gallery. Under its Blueprint program, the National Museum of American History opened *Communities in a Changing Nation: The Promise of 19th-Century America*, which explores the promise and reality of life in the 1800s through the experience of three different American communities. In September, a traditional Native American ceremony officially opened the

ground-breaking for the National Museum of the American Indian on the National Mall. Sitework is continuing, with the opening scheduled in 2002.

Over the past year, the Smithsonian has continued to present an astonishing variety of events and exhibitions to its visitors. Among these have been the annual Folklife Festival that featured the state of New Hampshire, the opening of the new Discovery Center and 3-D IMAX® theater in the National Museum of Natural History, and a wide-ranging selection of performances, lectures, and activities offered as part of the National Millenium celebration in Washington DC. The exhibitions offered have included, as a representative but far from exhaustive sampling, the following:

Locating the Spirit: Religion and Spirituality in African American Art, Anacostia Museum
Treasures from the Royal Tombs of Ur, Sackler Gallery
Unlimited by Design, Cooper-Hewitt, National Design Museum
Regarding Beauty: A View of the Late Twentieth Century, Hirshhorn Museum
Wrapped in Pride: Ghanaian Kente and African American Identity, National Museum of African Art
Edward Hopper: The Watercolors, National Museum of American Art
Theodore Roosevelt: Icon of the American Century, National Portrait Gallery
Tales of the Blue Crab, Smithsonian Environmental Research Center
Posted Aboard RMS Titanic, National Postal Museum
Make the Dirt Fly! Building the Panama Canal, Smithsonian Institution Libraries

The Smithsonian continued to benefit from many gifts and donations, including the very generous gift of Steven Udvar-Hazy towards the construction of the Dulles Center, the new aviation and space flight facility that will house many of the National Air and Space Museum's collections now in storage or undergoing restoration. The gift is the largest in the Institution's history, and one of the largest ever to any museum.

At the Sackler Gallery, the Paul Singer Collection, composed of more than 5,000 objects, mostly from ancient China, recently became the Gallery's largest acquisition to date. In another kind of acquisition, the National Zoo welcomed three Sumatran tiger cubs, a living testament to the Sumatran Tiger Species Survival Program, and to endangered species preservation.

Outreach and education activities continued to expand in 1999. The National Museum of Natural History is actively collaborating with five new partners to deliver electronically information about the Smithsonian's natural history collections and research to various locations across the Nation. The Smithsonian Astrophysical Observatory continued work on a discovery-based elementary school curriculum using astronomy as a unifying theme, as well as on middle school curricula relating to engineering designs and communications technology. The Smithsonian Environmental Research Center expanded its public offerings in 1999; over 10,000 individuals participated in its onsite programs, and thousands more participated through website activities.

The Institution's affiliations program continued to grow in 1999, with agreements now numbering a total of 25 institutions in Texas, Arizona, Florida, California, Rhode Island, Missouri, Tennessee, Puerto Rico, Pennsylvania, Washington DC, Kansas, New York, and Maryland. Projects involved include the Centro Alameda in San Antonio, TX, Inventure Place (the National Inventors Hall of Fame) in Akron, OH, and the B&O Railroad Museum in Baltimore, MD, to name a few.

To become part of communities around the world, the Smithsonian is continuing to move objects, databases, research and collections information, virtual exhibitions, lesson plans, and visitor services to the Internet. The astonishing acceleration of its use promises fulfillment of the global mandate expressed in the single sentence that Mr. Smithson wrote in 1826.

SMITHSONIAN INSTITUTION
FY 2001 BUDGET REQUEST SUMMARY

Account	*FY 2000 Appropriation*	*FY 2001 Request*
Salaries and Expenses	[1]$371,230,000	$396,800,000
Repair, Restoration and Alterations	47,900,000	[2]62,200,000
Construction	19,000,000	[3]4,000,000
Total Accounts	$438,130,000	$463,000,000

[1]Includes rescission of $1,671,000.
[2]The FY 2001 request also includes $17 million to become available on October 1, 2001, and $18 million to become available on October 1, 2002 to complete the renovation of the Patent Office Building.
[3]The FY 2001 request also includes $2.5 million to become available on October 1, 2001 to complete the Hilo base building.

The Smithsonian's FY 2001 budget request is based on the Institution's strategic plan, which is included in the Appendix, and its FY 2001 performance plan, which follows this section. Consistency between the Smithsonian's budget request and its mission, goals, strategies, and measures is the most effective way of ensuring that anticipated results are met.

For FY 2001, the Smithsonian's request for all operating and capital accounts totals $463 million, an increase of $24.9 million above the FY 2000 appropriation.

The Institution's FY 2001 request includes $396.8 million for Salaries and Expenses, $62.2 million for Repair, Restoration, and Alteration of Facilities, and $4 million for Construction. A detailed summary of the request is provided in the table at the end of this section.

SALARIES AND EXPENSES - The Salaries and Expenses (S&E) request includes $14.4 million in mandatory increases to sustain daily operations of the Institution. These increases are for additional costs associated with necessary pay, utilities, postage and communications, and rental space. These increases are beyond the Institution's control and account for approximately 53 percent of the total S&E increase requested for FY 2001.

In addition, the Smithsonian has identified priority program requirements for FY 2001 as follows:

National Museum of the American Indian ($8,695,000) - to continue research and development, begin production of inaugural exhibitions, and provide essential furnishings and equipment for the Mall Museum; and to support operations at the Cultural Resources Center (CRC) and the move of collections from New York City to the CRC in Suitland, Maryland.

Dulles Center - Collections Preparation and Program Planning ($2,580,000) - to prepare artifacts for relocation from the Paul E. Garber facility to the Dulles Center of the National Air and Space Museum and to plan educational and public programs for the Center.

Information Technology and Collections Access ($3,000,000) - to make more of its collections and knowledge accessible to a broader audience, including the electronic access to its collections, information and images; access to virtual exhibitions and educational materials; and support of expansion of affiliate relationships.

Security System Modernization and Maintenance ($2,000,000) – to continue replacement of the outdated, automated Smithsonian Institution Proprietary Security System and to begin the maintenance and upgrading of the modernized system components

Specific details of each requirement are provided in the Salaries and Expenses section of this request.

CAPITAL PROGRAM - The request for Repair, Restoration and Alteration of Facilities ($62.2 million) will help correct the unacceptable condition of four of the oldest buildings at the Smithsonian and maintain the current condition of other Institutional facilities through systematic renewal and repair. For FY 2001, this request includes the National Zoological Park and National Museum of American Art/National Portrait Gallery renovations, as well as repair, restoration, and alteration of other facilities.

The Smithsonian's Construction request ($4 million) includes funding to complete construction of the National Zoological Park's Water Exhibit; for Phase I of the construction and equipping of a base facility in Hilo, Hawaii for the Smithsonian Astrophysical Observatory's Submillimeter Array; and to design and begin construction of infrastructure improvements at the Smithsonian Environmental Research Center.

Specific details of each requirement are provided in the Capital Program section of this request.

SMITHSONIAN INSTITUTION FY 2001 BUDGET REQUEST BY APPROPRIATION ACCOUNT

	New Positions	
SALARIES AND EXPENSES		
FY 2000 Congressional Appropriation		[1]$371,230,000
FY 2001 Changes		
Non-recurring Costs		
One Less Compensatory Workday		-949,000
Museum Support Center Equipment		-1,000,000
NMNH East Court		-650,000
NMNH-Arctic Studies		-2,500,000
Mandatory Increases for Sustaining Base Operations		
Salary and Related Costs		
• Annualization of FY 2000 Pay Raises		4,050,000
• Panama Canal Treaty Implementation		330,000
• Proposed FY 2001 Pay Raises		7,376,000
• Workers' Compensation		138,000
Utilities, Postage, and Communications		871,000
Rental Space		1,629,000
Program Changes		
National Museum of the American Indian	35	8,695,000
Dulles Center - Collections Preparation and Program Planning	19	2,580,000
Information Technology and Collections Access		3,000,000
Security System Modernization and Maintenance		2,000,000
FY 2001 Salaries and Expenses Request	**54**	**$396,800,000**
REPAIR, RESTORATION AND ALTERATION OF FACILITIES		
National Zoological Park		10,000,000
National Museum of American Art/National Portrait Gallery (Patent Office Building)		17,000,000
All Other		35,200,000
FY 2001 Repair, Restoration and Alteration of Facilities		**$62,200,000**
CONSTRUCTION		
National Zoological Park Water Exhibit		1,000,000
Smithsonian Astrophysical Observatory-Hilo Base Building, Phase I		2,000,000
Smithsonian Environmental Research Center Infrastructure		1,000,000
FY 2001 Construction Request		**$4,000,000**
FY 2001 REQUEST, ALL ACCOUNTS	**54**	**$463,000,000**

[1]Includes $1,671,000 recission.

INTRODUCTION TO THE FY 2001 PERFORMANCE PLAN

The Institution has a five-year strategic plan and associated performance plans for FY 1999, FY 2000, and FY 2001 that are consistent with the guidelines of the Government Performance and Results Act of 1993. The strategic plan builds on the mission of the Smithsonian, established for the increase and diffusion of knowledge, by setting three goals:

- **increase knowledge** through research activities and use of Smithsonian collections

- **diffuse knowledge** through exhibitions, publications, programs, electronic communications, and affiliations and through improvements in education and museum training opportunities

- **support increased knowledge and diffusion** through improvements in finance, management, and physical infrastructure

The FY 2001 performance plan includes seven goals that are tied directly to programs: research and collections management; education, public programs and exhibitions; administration; and facilities and security. Each of the performance goals is also directly related to the strategic goals and objectives of the Institution. A copy of the strategic plan is included in the Appendix.

The goals cited in the FY 2001 performance plan reflect specific activities in which the Institution and its units will engage during FY 2001 in order to progress toward achieving the Institution's strategic goals. The measures and milestones included in the plan will enable the Smithsonian to gauge its progress during FY 2001 in reaching its strategic goals, and will also provide important information about whether strategic goals need to be adjusted in future years. Performance measured against the goals and targets for FY 2001 will be reviewed by Smithsonian management at the end of the fiscal year, and results will be reported to OMB and the Congress.

As the process matures, it is anticipated that the annual performance plan will serve two critical purposes. First, as a tool to assess performance and progress in key areas, it will enable Smithsonian managers to make strategic and operational decisions based on accurate and relevant data. Second, it will enable the Institution to communicate to the public, the

Executive Branch, and Congress the results and achievements of the Smithsonian's programmatic efforts in support of its mission.

The following section outlines goals and strategies for performance in FY 2001, as well as measures to assess the Institution's success. Also provided is an update of FY 2000 strategies, as well as accomplishments achieved with the FY 1999 plan.

SMITHSONIAN INSTITUTION PERFORMANCE PLAN
FISCAL YEAR 2001

I. Research and Collections Management

Goal #1: Maintain and enhance research

Strategy	*Results for FY 1999*	*Measure for FY 2000*	*Measure for FY 2001*	*Source of Funding*
Enhance Scientific Instrumentation				
Continue to work toward full operational status of the submillimeter telescope array	Two antennas were made fully operational on Mauna Kea **(SAO)**	Deploy one additional antenna and begin scientific observations on three frequency bands	Have a total of six antennas operational	Federal & Trust
Establish laboratory to analyze extraterrestrial material			Prepare Focused Ion Beam and related equipment for lab **(NMNH)**	Federal

I. Research and Collections Management (continued)

Goal #1: Maintain and enhance research (continued)

Strategy	*Results for FY 1999*	*Measure for FY 2000*	*Measure for FY 2001*	*Source of Funding*
Capitalize on SI Strengths in Conservation Biology				
Develop research program on causes, patterns, and effects of alien invasive species	Established a national database on alien invasive species in three U.S. coastal ecosystems, and a national database on ballast water delivery to all U.S. ports from foreign ports. **(SERC)**	Analyze and synthesize major patterns of alien invasive species in U.S. coastal ecosystems, and publish findings in several major books and journals. **(SERC)**	Develop methods to coordinate marine invasive species data within patterns of ballast water delivery to all U.S. ports **(SERC)**	Federal & Trust
Develop research program on ecological changes and impacts of El Niño and La Niña in marine ecosystems	Established Bocas Del Toro Research Station with setup of a temporary marine lab and modification of an existing dock. Also established a series of environmental monitoring sites. **(STRI)**	Work on a master plan for the entire Bocas Del Toro site. Continue operation of the environmental monitoring sites. **(STRI)**	Complete the Bocas Del Toro master plan and begin upgrade of existing facilities. Continue operation of the environmental monitoring sites. **(STRI)**	Federal & Trust

Goal #2: Provide improved access to collections, including expanded use of electronic technology

Strategy	*FY 1999*		*Measure for FY 2000*	*Measure for FY 2001*	*Source of Funding*
	Baseline as of 10/1/98	*Results for FY 1999*	*Target for FY 2000*	*Target for FY 2001*	
Increase the amount and availability of automated collection records	5,800,000 records in automated information systems	6,250,000 records in integrated automated information systems	6,600,000 collection records in integrated automated information systems	Continue to automate collection records for increased access	Federal & Trust
Increase the number of digitized images of collection objects online	74,000 digitized images online	121,000 digitized images online	400,000 digitized images online	Continue to digitize images for increased access	Federal & Trust
Assess integration and availability of collection data in automated collection information systems across the Institution				Establish baseline of each collecting unit in 5 objectives used to measure progress: • Status of CIS • Control of collections • Integration of research data • Images and other multimedia • Public access	Federal & Trust

I. Research and Collections Management (continued)

Goal #3: Provide effective collections care, including improved storage

Strategy	*FY 1999*		*Measure for FY 2000*	*Measure for FY 2001*	*Source of Funding*
	Baseline as of 10/1/98	*Results for FY 1999*	*Target for FY 2000*	*Target for FY 2001*	
Move collections items into improved and more accessible storage	65% of move completed **(Museum Support Center)**	66% of move completed **(Museum Support Center)**	74% of move completed **(Museum Support Center)**	82% of move completed **(Museum Support Center)**	Federal
		Moved 28,000 collection items from New York to Suitland **(American Indian, Cultural Resources Center)**	Move 74,000 collection items from New York to Suitland **(American Indian, Cultural Resources Center)**	Move 185,000 collection items **(American Indian, Cultural Resources Center)**	Federal
		Conservation lab operational, Star-Spangled Banner de-installed and treatment begun **(American History)**	Complete dye analysis and begin stitching removal (finish 30% of flag conservation) **(American History)**	Complete removal of linen support and cleaning of flag (the remaining 70% of treatment) **(American History)**	Federal & Trust

Goal #3: Provide effective collections care, including improved storage (continued)

Strategy	*Results for FY 1999*	*Measure for FY 2000*	*Measure for FY 2001*	*Source of Funding*
Move collections items into improved and more accessible storage (continued)	Completed asbestos removal from objects in Building 17; Building 17 renovation delayed **(American History)**	Issue contract for and complete renovation of Building 17 **(American History)**	Explore options for asbestos removal in Building 18 **(American History)**	Federal
	Relocated insect collections (inspected, cleaned, stabilized, packed, and moved to new location) **(Natural History)**	Complete Mollusk Division move **(Natural History)**	Complete 95% of East Court move **(Natural History)**	Federal
	4% of the work to prepare large aircraft to be moved from Suitland to Dulles has been completed **(Air and Space)**	Categorize, preserve and prepare an additional 4% of the large aircraft for the move from Suitland to Dulles **(Air and Space)**	Prepare an additional 30% of the large aircraft for the move from Suitland to Dulles **(Air and Space)**	Federal

II. Education, Public Programs and Exhibitions

Goal #1: Provide new and updated exhibits that serve a wider audience

Strategy	*Results for FY 1999*	*Measure for FY 2000*	*Measure for FY 2001*	*Source of Funding*
Update or renew permanent exhibits	Installed *On Time* exhibition **(American History)**	Begin installation of *American Legacies* exhibit in place of *Material World* **(American History)**	Open *American Legacies* exhibit **(American History)**	Federal & Trust
	Completed Star-spangled Banner laboratory **(American History)**	Open *Ipswich House* exhibit **(American History)**	Complete construction of new flag hall **(American History)**	Trust
			Fabricate and install new welcome center in Taylor Gallery **(American History)**	Trust
	Installed new Hall of African History and Culture and upgraded cases in North American Indian Hall **(Natural History)**	Open the FossiLab, complete design and script for Human Origins upgrade, and update the focus gallery in the *African Voices* exhibit **(Natural History)**	Complete Human Origins upgrade, begin production of Mummies, and complete design for reinstallation of Mammal Hall **(Natural History)**	Federal & Trust

Goal #1: Provide new and updated exhibits that serve a wider audience (continued)

Strategy	*Results for FY 1999*	*Measure for FY 2000*	*Measure for FY 2001*	*Source of Funding*
Achieve progress in making public exhibits accessible to all visitors	Completed design for an accessible kiosk to provide alternative interpretation for locations where walkway slopes exceed 8.3% **(National Zoological Park)**	Have a full-service program in effect to accommodate visitors needing assistance on demand or by advance request **(National Zoological Park)**	Complete design of an accessible entrance for the south side of NMNH **(Natural History & Ofc. of Physical Plant)**	Federal & Trust
	Completed installation of accessible new exhibits, such as *African Voices* and reinstallation of the elephant in the Rotunda **(Natural History)**	Require that all new exhibit designs and installations meet accessibility requirements **(SI Wide)**	Provide improved accessibility to most Smithsonian publications by offering alternative formats **(SI Wide)**	Federal & Trust

II. Education, Public Programs and Exhibitions (continued)

Goal #1: Provide new and updated exhibits that serve a wider audience (continued)

Strategy	*Results for FY 1999*	*Measure for FY 2000*	*Measure for FY 2001*	*Source of Funding*
Increase and diversify visitor audience	Established baseline measures for the number of SI exhibits developed/distributed to rural locations and underserved audiences **(SITES)**	Increase by 20% the number of rural communities hosting exhibitions; increase by 30% the number of libraries, train depots, parks, malls and other locations that host traveling exhibits **(SITES)**	Continue to produce exhibits aimed at diverse audiences and measure impact and attendance **(SI Wide)**	Federal & Trust
	Sampling audience diversity is now a component of each study conducted on specified exhibits **(SI Wide)**	Continue to monitor attendance of diverse audiences to exhibits and programs **(SI Wide)**		Federal & Trust

III. Administration

Goal #1: Improve the efficiency of Institution-wide administrative work processes

Strategy	*Results for FY 1999*	*Measure for FY 2000*	*Measure for FY 2001*	*Source of Funding*
Increase the data available from and availability of systems and subsystems which are aimed at improving the efficiency of Smithsonian work processes	Implemented spending plan modules for all fund sources in automated budget system, except capital accounts	Evaluate the use of spending plan modules for all fund sources; finalize capital accounts module	N/A	Federal & Trust
	Developed Smithsonian Financial System reports for management use	Assess the extent to which financial system reports are used by and useful to management for decision making	N/A	Federal & Trust
		Define the requirements for a new and expanded administrative Management Information System	Begin implementation of financial modules	Federal & Trust
		Develop personnel reform policies that are responsive to the needs of the Institution	Implement pilot projects in performance management and recruitment	Federal & Trust

III. Administration (continued)

Goal #2: Seek opportunities to improve fundraising and increase revenues

Strategy	*Results for FY 1999*	*Measure for FY 2000*	*Measure for FY 2001*	*Source of Funding*
Develop capital campaign	Developed the Case Statement based on museums, research institutes, and Institution-wide needs and priorities	Test umbrella case statement, develop museum/research case statements, develop gift tables of support by museum and research institute	Finalize umbrella case statement, test museum/research case statements, and finalize gift tables of support by museums and research institutes	Trust
	Developed campaign policies, prospect management, tracking and coordination, campaign gift counting, stewardship, and donor relations	Implement campaign volunteer structure, recruit and train volunteer leadership	Determine campaign goal, public announcement of campaign, and continuation of campaign marketing/ communications strategy	Trust
	Implemented a program for Institution-wide staff development to focus on major gift activity	Identify and evaluate prospects, execute marketing/communicat ion strategy, solicit leadership gifts and Smithsonian staff/volunteers	Continue the identification and evaluation of prospects, the solicitation of leadership and major gifts, and the utilization of volunteer leadership	Trust

IV. Facilities and Security (Salaries and Expenses Only)

Goal #1: Maintain, preserve and upgrade the quality, condition and security of existing facilities

Strategy	*Measure for FY 1999*		*Measure for FY 2000*	*Measure for FY 2001*	*Source of Funding*
	Baseline as of 10/1/98	*Results for FY 1999*	*Target for FY 2000*	*Target for FY 2001*	
Continue planning and implementing the systematic renewal and repair of facilities to ensure all major buildings are within an acceptable performance range, as defined by the Building Research Board of the National Research Council	Two buildings below the acceptable level	No additional buildings fell below the acceptable level	No additional buildings fall below the acceptable level Begin work on Patent Office Building; asbestos removal begins Continue planned renovation of NMNH	No additional buildings fall below the acceptable level Patent Office Building emptied and major renovation begins Continue planned renovation of NMNH	Federal Federal Federal
Provide improved electronic security system	Developed and delivered written standards for system Delivered master design plan Delivered acceptance procedures plan Delivered and accepted card access master database, photo pass and ID system Met milestones for becoming Y2K ready by the end of calendar year 1999		System Design (Mall Wide) 100% System construction and installation (Mall Wide) 50% Achieve 100% Y2K Compliance by 12/31/99	Complete installation	Federal

SMITHSONIAN INSTITUTION
SALARIES AND EXPENSES

Summary of FY 2001 Change

FY 2000 Appropriation		$372,901,000
FY 2000 Rescission		(1,671,000)
		$371,230,000
FY 2001 Change:		
Non-Recurrring Costs—		
One Less Compensable Workday	(949,000)	
Museum Support Center Equipment	(1,000,000)	
NMNH East Court	(650,000)	
NMNH Arctic Studies	(2,500,000)	
Total Non-Recurring Costs		($5,099,000)
Mandatory Increases—		
Salary and Related Costs	$11,894,000	
Utilities, Postage and Communications	871,000	
Rental Space	1,629,000	
Total Mandatory Costs		$14,394,000
Program Increases—		
National Museum of the American Indian	$8,695,000	
Dulles Center – Collections Preparation and Program Planning	2,580,000	
Information Technology and Collections Access	3,000,000	
Security System Modernization and Maintenance	2,000,000	
Total Program Increases		$16,275,000
FY 2001 Request		$396,800,000

SMITHSONIAN INSTITUTION
SALARIES AND EXPENSES
SUMMARY OF THE 1999 APPROPRIATION AND THE 2000 AND 2001 ESTIMATES

Dollars in Thousands
FTE = Full-Time Equivalent

PAGE #		FY 1999 ACTUAL /1		FY2000 ESTIMATE /2		FY 2001 ESTIMATE		ANALYSIS OF CHANGE		
									Mandatory	
		FTE	Amount	FTE	Amount	FTE	Amount	FTE	Costs	Program
	MUSEUMS AND RESEARCH INSTITUTES									
35	Anacostia Museum and Center for African American History and Culture	25	1,902	25	1,875	25	1,922	0	47	0
38	Archives of American Art	24	1,618	24	1,680	24	1,736	0	56	0
42	Arthur M. Sackler Gallery/Freer Gallary of Art	77	6,077	77	6,059	77	6,250	0	191	0
45	Center for Folklife and Cultural Heritage	14	1,746	14	1,750	14	1,798	0	48	0
48	Cooper-Hewitt, National Design Museum	43	2,784	43	2,866	43	2,970	0	104	0
51	Hirshhorn Museum and Sculpture Garden	71	4,461	71	4,615	71	4,766	0	151	0
54	National Air and Space Museum	214	12,574	214	13,228	233	16,317	19	509	2,580
59	National Museum of African Art	54	4,071	54	4,253	54	4,365	0	112	0
62	National Museum of American Art	123	8,252	123	8,624	123	8,929	0	305	0
65	National Museum of American History	313	19,658	315	20,560	315	21,390	0	830	0
69	National Museum of the American Indian	224	13,761	235	22,090	270	31,175	35	390	8,695
77	National Museum of Natural History	582	40,833	582	45,218	582	43,603	0	1,535	(3,150)
81	National Portrait Gallary	85	5,403	85	5,626	85	5,835	0	209	0
84	National Zoological Park	317	19,695	317	20,453	317	21,175	0	722	0
88	Smithsonian Astrophysical Observatory	141	18,753	141	19,885	141	20,578	0	693	0
92	Smithsonian Center for Materials Research and Education	36	2,974	36	3,165	36	3,265	0	100	0
95	Smithsonian Environmental Research Center	45	3,147	45	3,206	45	3,310	0	104	0
98	Smithsonian Tropical Research Institute	175	9,167	176	9,930	176	10,545	0	615	0
	Subtotal	2,563	176,876	2,577	195,083	2,631	209,929	54	6,721	8,125

SMITHSONIAN INSTITUTION
SALARIES AND EXPENSES
SUMMARY OF THE 1999 APPROPRIATION AND THE 2000 AND 2001 ESTIMATES

Dollars in Thousands
FTE = Full-Time Equivalent

PAGE #		FY 1999 ACTUAL /1		FY2000 ESTIMATE /2		FY 2001 ESTIMATE		ANALYSIS OF CHANGE		
		FTE	Amount	FTE	Amount	FTE	Amount	FTE	Mandatory Costs	Program
	PROGRAM SUPPORT AND OUTREACH									
102	Communications and Educational Programs	72	4,837	71	5,379	71	5,533	0	154	0
106	Institution-wide Programs	0	4,060	0	5,693	0	8,693	0	0	3,000
112	Office of Exhibits Central	40	2,237	40	2,319	40	2,414	0	95	0
114	Major Scientific Instrumentation	0	9,984	0	7,244	0	7,244	0	0	0
117	Museum Support Center	69	4,698	69	4,491	69	3,562	0	71	(1,000)
119	Smithsonian Institution Archives	24	1,451	24	1,493	24	1,559	0	66	0
121	Smithsonian Institution Libraries	109	6,711	109	7,273	109	7,489	0	216	0
125	Smithsonian Institution Traveling Exhibition Service	46	2,991	45	3,047	45	3,149	0	102	0
	Subtotal	360	36,969	358	36,939	358	39,643	0	704	2,000
129	ADMINISTRATION	383	34,000	381	34,616	381	35,874	0	1,258	0
	FACILITIES SERVICES									
132	Office of Protection Services	773	32,248	775	33,554	775	36,889	0	1,335	2,000
136	Office of Physical Plant	516	63,234	516	71,038	516	74,465	0	3,427	0
	Subtotal	1,289	95,482	1,291	104,592	1,291	111,354	0	4,762	2,000
	UNUSED ALLOCATED FTES /3	(236)	0	(307)	0	(307)	0	0	0	0
	GRAND TOTAL	4,359	343,327	4,300	371,230	4,354	396,800	54	13,445	12,125

Notes:
1/ Reflects authorized FTEs.
2/ Total astimate includes FY2000 rascission of $1.671 million.
Distribution reflects raorganizations and permanent reprogrammings. (See "Adjustments to FY 2000 Funding" in the Appendix.)
3/ Reflects total actual and anticipated lapse of allocated workyears.

SALARIES AND EXPENSES

FY 1999 Appropriation[1]	$ 351,854,000
FY 2000 Appropriation[2]	$ 371,230,000
FY 2001 Estimate	$ 396,800,000

[1]FY 1999 Salaries and Expenses includes $4,700,000 emergency supplemental appropriation to replace non-Y2K-compliant components of the Smithsonian Institution Proprietary Security System.
[2]FY 2000 Salaries and Expenses includes the $1,671,000 rescission.

This section provides specific details about the Institution's Salaries and Expenses budget request for FY 2001. Of the total increase requested, approximately 53 percent is attributable to mandatory costs for sustaining base operations and the remainder is for priority program requirements for critical ongoing projects within the Institution.

NON-RECURRING COSTS - Fiscal year 2001 non-recurring costs include the following:

One Less Compensatory Workday ($949,000) - to return base funding for one less workday in FY 2001 for employee salaries and benefits costs

Museum Support Center Equipment ($1,000,000) – to reduce base funding as the final equipment is procured for the Museum Support Center

National Museum of Natural History East Court ($650,000) – to reduce base funding as the East Court infill project nears completion with funds made available in FY 2000

National Museum of Natural History Arctic Studies Center ($2,500,000) – to eliminate base funding added to the FY 2000 appropriation for the National Museum of Natural History's Arctic Studies Center to include assistance to other museums

MANDATORY INCREASES FOR SUSTAINING BASE OPERATIONS - This request includes funds for mandatory costs, as shown below.

Salary and Related Costs:	
Annualization of FY 2000 Pay Raises	$4,050,000
Panama Canal Treaty Implementation	330,000
Proposed FY 2001 Pay Raises	7,376,000
Workers' Compensation	138,000
Subtotal, Salary and Related Costs	$11,894,000
Other Costs:	
Utilities, Postage, and Communications	$871,000
Rental Space	1,629,000
Subtotal, Other Costs	$2,500,000
Total Mandatory Increases	$14,394,000

Salary and Related Costs - The Institution requests $11,894,000 for higher projected salary and benefits costs in FY 2001 for staff as described below. A line-item display of the Necessary Pay components of these costs, including FY 2000 pay annualization and the proposed FY 2001 pay raise, minus the costs for one less compensatory day, is also provided.

- **Annualization of FY 2000 Pay Raises ($4,050,000)** - to annualize the costs of the 4.94-percent January 2000 pay raise, for one-quarter of a year.
- **Panama Canal Treaty Implementation ($330,000)** - to annualize the cost to the Smithsonian Tropical Research Institute of adjusting to the local employment system of Panama ($319,000), and an additional $11,000 to fund the increased costs of payroll processing.
- **Proposed FY 2001 Pay Raises ($7,376,000)** - to fully fund the anticipated 3.7-percent January 2001 pay raise for three-quarters of a year.
- **Workers' Compensation ($138,000)** - is required as specified in the provisions of Section 8147(b) of Title 5, United States Code, as amended April 21, 1976 by Public Law 94-273. The FY 2001 bill for the Institution's Federal portion ($2,122,000) covers the actual expenses incurred for the period July 1, 1998, through June 30, 1999. With an amount of $1,984,000 in its FY 2000 base for workers' compensation, the Institution requests an additional $138,000.

FY 2001 Necessary Pay Costs

(Dollars in Thousands)

LINE ITEM	FY 2000 Pay Raise	FY 2001 Pay Raise	One Less Workday	Total Necessary Pay
Anacostia Museum and Center for African American History and Culture	19	32	(4)	47
Archives of American Art	22	39	(5)	56
Arthur M. Sackler Gallery/Freer Gallery of Art	76	133	(18)	191
Center for Folklife and Cultural Heritage	19	33	(4)	48
Cooper-Hewitt, National Design Museum	45	68	(9)	104
Hirshhorn Museum and Sculpture Garden	60	105	(14)	151
National Air and Space Museum	199	357	(47)	509
National Museum of African Art	45	77	(10)	112
National Museum of American Art	121	213	(29)	305
National Museum of American History	308	596	(74)	830
National Museum of the American Indian	156	271	(37)	390
National Museum of Natural History	574	1,098	(137)	1,535
National Portrait Gallery	80	148	(19)	209
National Zoological Park	288	502	(68)	722
Smithsonian Astrophysical Observatory	226	348	(47)	527
Smithsonian Center for Materials Research and Education	40	69	(9)	100
Smithsonian Environmental Research Center	40	73	(9)	104
Smithsonian Tropical Research Institute	114	198	(27)	285
Communications and Educational Programs	60	108	(14)	154
Office of Exhibits Central	35	68	(8)	95
Museum Support Center	28	50	(7)	71
Smithsonian Institution Archives	23	48	(5)	66
Smithsonian Institution Libraries	86	150	(20)	216
Smithsonian Institution Traveling Exhibition Service	41	71	(10)	102
Administration	406	810	(96)	1,120
Office of Protection Services	502	952	(119)	1,335
Office of Physical Plant	437	759	(103)	1,093
TOTAL NECESSARY PAY	4,050	7,376	(949)	10,477

Utilities, Postage, and Communications - The Institution requests a net increase of $871,000 for utilities, postage, and communications in FY 2001 to cover additional costs attributable to increased consumption and projected rate increases. The following table displays estimates from FY 1999 through FY 2001. Detailed explanations of each line item follow.

Federal Utilities, Postage, and Communications Costs
FY 1999–FY 2001

(Dollars in thousands)	FY 1999 Actual	FY 2000 Estimate	FY 2001 Estimate
Electricity	9,787	10,617	11,120
Steam	3,249	3,432	3,396
Gas	1,170	1,468	1,628
Fuel Oil/Water	340	354	365
DC Gov't Water/Sewer	2,055	5,139	3,976
Postage	2,100	2,317	2,466
Communications	9,848	8,773	10,020
Total	28,549	32,100	32,971
Base	28,749	32,100	32,100
Surplus/(Deficit)	200	0	(871)

- ***Electricity*** - A major component of the utilities account is electricity. In addition to lighting and office equipment, electricity powers the machinery that provides cooling for Smithsonian buildings. A vigorous energy management program has allowed the Institution to maintain consistent electrical consumption levels throughout most facilities. The most significant element of the program is the installation of automated central controls on most building systems that limit consumption during high-use or high-rate periods and during unoccupied hours.

  Electrical energy consumption will increase due to the initial start-up of the National Museum of the American Indian as it nears completion, and as preparation of the inaugural exhibitions proceeds. Remote sites with new facilities will also require increased electricity, such as the lab modules at the Smithsonian Environmental Research Center in Edgewater, Maryland. An inflation factor of three percent has been included in the FY 2001 estimate.

These needs are offset in part by a reduction of electrical consumption at the Patent Office Building in FY 2001 resulting from the relocation of its occupants and collections during the major capital renewal project for that facility.

- ***Steam*** - Steam is used primarily for heating Smithsonian facilities on the Mall and in New York, year-round humidification, and hot water production. Maintaining an interior environment conducive to the preservation of artifacts requires a great deal of steam consumption. Because of new metering techniques used by the General Services Administration, the Institution anticipates steam consumption remaining at current levels. The FY 2001 estimate includes a three-percent inflation factor.

  These needs are offset in part by a reduction of steam consumption at the Patent Office Building in FY 2001 resulting from the relocation of its occupants and collections during the major capital renewal project for that facility.

- ***Natural Gas*** - Natural gas costs will increase when the boilers at the National Museum of the American Indian are brought online to heat the facility. The FY 2001 estimate also reflects a three-percent inflation factor.

- ***Fuel Oil/Water*** - Because natural gas is used as the primary heating and cooling fuel in most facilities, oil is now used as a back-up heating fuel. No increase in consumption is expected. Water consumption at satellite facilities in Maryland and Virginia should remain constant. The FY 2001 estimate includes a three-percent inflation factor.

- ***DC Government Water/Sewer*** - The FY 2001 estimate for water and sewer costs levied by the District of Columbia Government is based on cost projections provided by the District in 1999. The estimate includes a five-percent rate increase effective in 2001 and an anticipated increase in water consumption due to the completion of the National Museum of the American Indian.

  These needs are offset by funds received in FY 2000 for one-time costs to cover deferred charges for FY 1997-1999 based on the 42-percent rate increase that became effective in FY 1997.

- ***Postage*** - The FY 2001 estimate reflects a three-percent adjustment to cover the cost of an anticipated increase in volume

for the Institution and the increase in costs associated with the National Museum of the American Indian.

- ***Communications*** - The FY 2001 estimate for communications includes funds to support inflationary increases in voice and data communications and infrastructure and to support services in new facilities at the Smithsonian Tropical Research Institute and the National Museum of the American Indian.

Chiller Plant - Equipment for cooling Smithsonian buildings on the south side of the Mall—the Castle, the Arts and Industries Building, the Hirshhorn Museum and Sculpture Garden, the National Air and Space Museum (NASM), and the Quadrangle—has reached and, in some cases, exceeded its useful life. At the same time, the building on the south side of the Mall, east of NASM, that will house the National Museum of the American Indian (NMAI) and is scheduled to open in December 2002, needs a source of chilled water.

The General Services Administration (GSA) has expressed an interest in meeting the Institution's chilled water needs. It submitted an engineering report and cost proposal in late January 2000 that the Smithsonian is reviewing. If GSA can meet these needs and schedule, driven by the NMAI opening, negotiations will begin. Budgetary impact will be determined during these negotiations. The Board of Regents has authorized the Secretary to pursue a strategy in conjunction with a major energy provider if GSA cannot meet the Institution's needs and schedule.

Rental Space - $1,629,000 is requested for necessary rental increases in FY 2001, as described below.

- ***Smithsonian Astrophysical Observatory (SAO)*** - $166,000 is requested for increased costs of rent for SAO operations in Cambridge, Massachusetts. This amount is necessary to cover uncontrollable rental increases of existing space at Cambridge facilities.

- ***Central Rent*** - $1,463,000 is requested for increased expenses in the central rent account. Leased space in the Washington DC, New York and Boston areas provides critical collection housing and storage, as well as space for the Institution's exhibition, education, research, and administrative offices. The request reflects projected cost increases in base rent, operating, and real estate charges. The increase includes $575,000 for the annualization of leased swing space for occupants of the Patent Office Building (National Museum of American Art and National

Portrait Gallery), and a projected inflationary increase of $888,000 for the rental of office and storage space for Federal activity in the Washington DC area.

The following table reflects projected costs for Federal central rental space for FY 1999 through FY 2001.

Federal Central Rental Costs
FY 1999–FY 2001

(Dollars in thousands)	FY 1999 Actual	FY 2000 Estimate	FY 2001 Estimate
Office Space	3,196	3,386	3,897
Warehouse Space/Other	2,985	2,323	3,598
NMAA/NPG Relocation	--	2,598	2,275
Total	6,181	8,307	9,770
Base	6,233	8,307	8,307
Surplus/(Deficit)	52	0	(1,463)

SUMMARY OF PROGRAM CHANGES - The Institution requires funding for the following projects in FY 2001. Details are provided in the line-item narratives for each respective project.

National Museum of the American Indian ($8,695,000) - to support operations at the Cultural Resources Center; the move of collections from New York City to Suitland, Maryland; and requirements associated with the opening in 2002 of the Mall Museum, including Mall exhibits development.

Dulles Center - Collections Preparation and Program Planning ($2,580,000) - to prepare artifacts for relocation from the Garber facility to the Dulles Center of the National Air and Space Museum and to plan educational and public programs for the Center.

Information Technology and Collections Access ($3,000,000) - to make more of its collections and knowledge accessible to a broader audience, including the electronic access to its collections, information and images; access to virtual exhibitions and educational materials; and support of expansion of affiliate relationships.

Security System Modernization and Maintenance ($2,000,000) - to continue replacement of the outdated, automated Smithsonian Institution Proprietary Security System and to begin the maintenance and upgrading of the modernized system components.

The following table provides the details of the FY 2001 request for No-Year funding.

SMITHSONIAN INSTITUTION
FY 2001 S&E NO-YEAR FUNDING REQUEST TO CONGRESS

Program	FY 2000 Enacted	FY 2001 Request
	(Dollars in Thousands)	
Major Scientific Instrumentation	7,244	7,244
Collections Acquisition	1,078	1,078
Museum Support Center - Equipment and Move[1]	3,128	2,157
National Museum of Natural History		
East Court Project Move[1]	850	200
Exhibition Reinstallation	1,071	1,071
Arctic Studies	2,500	0
Total	4,421	1,271
National Museum of the American Indian	22,090	31,175
NMNH Repatriation Program	1,472	1,515
Institution-Wide Programs		
Research Equipment	1,885	1,885
Information Technology and Collections Access	2,810	5,810
Latino Programming	998	998
Total	5,693	8,693
Security Modernization and Maintenance (OPS)	0	2,000
TOTAL, S&E NO-YEAR FUNDING	**45,126**	**55,133**

[1]FY 2000 enacted includes rescission for MSC Move ($542,000) and East Court Project Move ($150,000).

ANACOSTIA MUSEUM AND CENTER FOR AFRICAN AMERICAN HISTORY AND CULTURE

	APPLICATION OF OPERATING RESOURCES							
	FEDERAL APPROPRIATIONS		GENERAL TRUST		DONOR/SPONSOR DESIGNATED		GOV'T GRANTS & CONTRACTS	
	FTE	$000	FTE	$000	FTE	$000	FTE	$000
FY 1999 ACTUAL	25	1,902	6	869	0	129	0	0
FY 2000 ESTIMATE	25	1,875	4	544	0	150	0	0
FY 2001 ESTIMATE	25	1,922	4	688	1	250	0	0

ABSTRACT - The Anacostia Museum and Center for African American History and Culture explores the historical and social heritage and cultural expressions of people of African descent living in the Americas. The Museum presents exhibitions in the Arts and Industries Building and at its facility in Southeast Washington. The Museum also sponsors scholarly programs and a variety of educational activities, and assists in the planning and development of African American and multi-cultural exhibits or projects nationwide.

For FY 2001, the Smithsonian is not seeking additional funding for programmatic increases for the Anacostia Museum and Center for African-American History and Culture. The Institution requires $47,000 for Necessary Pay for existing staff funded in this line item.

PROGRAM - The Anacostia Museum and Center for African American History and Culture studies and interprets Black contributions to customs, traditions, social fabric and history of the Americas. The Museum collects, preserves, and exhibits historical and cultural artifacts, photographs, and archival materials including organizational records and personal histories. The Museum develops exhibitions and publications, and often serves as the venue for traveling exhibitions developed at other museums across the country. The Museum's educational and scholarly programs reach an audience that ranges from elementary school students to those with advanced degrees working in academic institutions.

From December 1999 through the spring of 2001, the Museum's Southeast Washington facility will be closed to the public while it undergoes renovation. During the renovation, the Arts and Industries Building will continue to be the Museum's primary site for exhibitions.

Research - The Museum is actively engaged in research projects that will result in exhibitions, publications, and programs. Explorations of African American dance and African American cooking and culinary traditions are ongoing. New initiatives include an examination of family and community celebrations and African American contributions to the film and entertainment industries. Staff members are also engaged in photographic research that will result in a pictorial history of African American community life in Washington DC. Plans for a research project focusing on Carnival traditions in the Caribbean and in European and American cities with large Afro-Caribbean populations are in the early stages of development.

Exhibitions - *Locating The Spirit: Religion and Spirituality in African American Art,* a multi-faceted photographic and art exhibition, was installed at the Anacostia Museum facility. It continued the examination of the role of religion in African American community life highlighted in *Speak to My Heart: Communities of Faith and Contemporary African American Life*, which is on view in the Arts and Industries Building until December 2000. Retrospective exhibitions featuring the works of noted African American photographer P. H. Polk and Alma Thomas, the Washington-based abstractionist, were also installed at the Southeast facility. The Museum also mounted three additional exhibitions in the Arts and Industries Building, two of which were developed by Washington-based photographer and collector Roland Freeman. *Mule Train Remembered* was a photographic essay on the Poor Peoples' Campaign and March of 1968; *Communion of the Spirits* celebrated the lives and artistry of African American quilt makers, and featured some prominent collectors such as Dr. Camille Cosby and Dr. Bernice Johnson Reagon. *Africa By Africans*, an exhibit developed by the Paris-based publication *Revue Noire*, showcased the first photographic survey of African life featuring all African-born photographers.

Education, Outreach, and Special Events - The Museum continued its annual Black History Month tradition of presenting Carnival, a black tie fund-raising gala. More than 500 supporters enjoyed the festivities at the Castle and in the Arts and Industries Building. The Museum also sponsored the Capital Children's Carnival, which is expected to become an annual event. Co-sponsored by the *Washington Post*, this event attracted more than 14,000 people.

The Museum continues to coordinate the Institution's main Martin Luther King observance, which in 1999 featured classical vocalist Jubilant Sykes and jazz musician Terrance Blanchard.

In addition to a number of workshops and educational activities, the Museum enhanced its outreach profile by co-sponsoring the James A. Porter Colloquium on African American Art with Howard University. Drawing upon works in the exhibit, *Locating the Spirit*, this three-day event attracted standing-room-only audiences and featured participation by scholars and artists from around the country.

The Museum continued its long-term partnership with the Lucy Ellen Moten Elementary School and also began focus-group discussions with community civic and educational leaders about the development of a museum-based after-school program.

NONAPPROPRIATED RESOURCES – General Trust Funds provide support for salaries and benefits of administrative personnel, development activities and exhibition-related costs. Donor/Sponsor designated funds provide support for specific exhibitions, programs, projects, and events.

ARCHIVES OF AMERICAN ART

	APPLICATION OF OPERATING RESOURCES							
	FEDERAL APPROPRIATIONS		GENERAL TRUST		DONOR/SPONSOR DESIGNATED		GOV'T GRANTS & CONTRACTS	
	FTE	$000	FTE	$000	FTE	$000	FTE	$000
FY 1999 ACTUAL	24	1,618	0	119	12	638	0	0
FY 2000 ESTIMATE	24	1,680	0	122	12	677	0	0
FY 2001 ESTIMATE	24	1,736	0	107	10	635	0	0

ABSTRACT - The Archives of American Art (AAA) is the world's largest repository of primary source documentation on the history of visual arts and culture in America. For more than 45 years, the Archives has collected, preserved, and made available for study such diverse materials as letters and diaries of artists and craftspersons; manuscripts of critics and scholars; records of art museums, galleries, and schools; photographs; works of art on paper; and recorded oral and video interviews. More than 14 million documents provide an indispensable resource for researchers, who, in addition to consulting original papers at the Washington DC headquarters, may access selected holdings on microfilm worldwide through interlibrary loan or at Archives centers in Washington DC, New York, and San Marino, California, and affiliated research facilities in Boston and San Francisco. The Archives also provides Internet access to its resources and services through its website and online catalog.

For FY 2001, the Smithsonian is not seeking additional funding for programmatic increases for the Archives of American Art. The Institution requires $56,000 for Necessary Pay for existing staff funded in this line item.

PROGRAM - AAA collects, preserves, and makes available for study the records, original papers, photographs, diaries, and oral history interviews of artists, craftspersons, collectors, dealers, critics, museums, and other arts institutions. In FY 1999, AAA continued to meet its goal of increasing accessibility to the collections through a variety of means, including the processing of papers, the publication of finding aids, the display of original documents in exhibitions, website enhancement, and other forms of outreach.

Research - In FY 1999, AAA continued to employ technology to increase access for its Internet users. Among the enhancements was *A Preliminary Guide to Resources on Asian American Artists at the Archives of American Art*. The guide, presented in conjunction with Asian-Pacific American Heritage Month, provides documents and photographs online. A published guide comparable to those already published by the Archives for the papers of African American and Latino artists is in preparation.

The Archives is currently engaged in a pilot project using Encoded Archival Description (EAD) to encode fifty of its finding aids. EAD is a digital format that will make the finding aids accessible to researchers worldwide on the Web. A researcher can search encoded finding aids individually or in combination with the growing number of similarly encoded finding aids contributed by other archival repositories throughout the world. Once encoded in EAD, the finding aids will be contributed to the Research Libraries Group Archival Resources, providing even greater accessibility to the Archives' rich holdings.

Collections Acquisitions - In FY 1999, the Archives made significant additions to its holdings of over 14 million documents. Among these was the final installment of the papers of Marcel Breuer (1902-1981), including financial records and personal and professional correspondence with his colleagues from the Bauhaus. AAA also acquired the complete records of the Byron Gallery, 1960-1971, which specialized in Surrealist masters and younger Pop, Op, Conceptual, and Minimal artists. Other new acquisitions include the papers of Mildred Baker (1905-1999), which document her work on the Federal Art Project from 1935-1943. Also in FY 1999, AAA collected additions to the Beatrice Wood (1893-1998) papers; and papers of Abbott Handerson Thayer (1849-1921), who corresponded with numerous contemporaries, including Samuel Clemens, Daniel Chester French, William James, and N. C. Wyeth.

Funds from the Institution-wide program for Latino programming enabled the Archives to complete its Puerto Rican Art Documentation Project, including a comprehensive survey of art-related material in Puerto Rico and a survey of Puerto Rican art-related primary source material in New York City. These funds also supported the Cuban-American Oral History Interview Project, which funded the transcribing and final editing phase of oral history interviews of ten prominent Cuban-American artists in Miami. The transcripts were made available online through the Archives' website in October 1999. Funding also supported the Chicano Art Documentation Project, with oral histories being conducted with artists in San Francisco and Los Angeles. Also underway is the publication of a

revised, expanded research guide to the papers of Latino and Latin American artists in the Archives.

Collections Management - AAA made significant progress in its goal to increase accessibility to collections with several processing projects. Among these were the papers of Cuban art historian Giulio V. Blanc (d. 1995), dating from 1923 to 1995, which contain extensive files on both major and lesser-known contemporary Cuban artists. The Archives also processed the records of the American Federation of Arts (AFA), dating from AFA's founding in 1909 through 1993. The collection is particularly valuable for its documentation of twentieth century American art history and the wealth of information about the numerous programs and exhibitions supported and implemented by the AFA to promote and study contemporary American art. AAA is publishing a finding aid to this collection, as well as a finding aid to the Downtown Gallery papers, which the Archives has recently processed and microfilmed. The Downtown Gallery specialized in contemporary American art as well as pioneering in the field of American folk art, and its founder, Edith Halpert (1900-1970), was deeply involved in fostering the efforts of African American artists to gain recognition for their work.

Publications and Outreach - The Archives of American Art *Journal* publishes scholarly articles showcasing AAA's collections, as well as book reviews and reports on recent important acquisitions. In FY 1999, AAA presented the exhibit *In Sight: Portraits of Folk Artists by Chuck Rosenak*. The show, comprising photographs and selected documents from the folk art collectors Chuck and Jan Rosenak, included objects from the National Museum of American Art's Rosenak Collection that complemented the Archives' documents. The Rosenaks had previously donated to the Archives their extensive research files, including letters, more than a thousand photographs of folk artists, printed material, and tape-recorded interviews. *In Sight* afforded an excellent opportunity for the Archives to reach a broad audience of folk art aficionados and to make contacts that may lead to acquisitions. An online version of the show is found on the Archives website. The Archives also presented the exhibit *Eyre de Lanux: Designs of a Muse*, chronicling the life and works of little-known American artist Eyre de Lanux (1894-1996), whose papers span 80 years and highlight her friendships with Picasso, Brancusi, and Louis Aragon.

The Archives manages an active program of outgoing loans to museums and other scholarly institutions, and continues its tradition of providing educational opportunities to an ethnically diverse population through internships and fellowships.

NONAPPROPRIATED RESOURCES - Trust funds provide partial support for Archives operations and finance a variety of projects and programs. In FY 1999, grants funded by The Henry Luce Foundation, Inc. and the Getty Grant Program enabled AAA to process several major collections. Throughout the year, donors made numerous gifts toward the matching of a $500,000 challenge grant from The Brown Foundation, Inc., to endow Archives' publications. Among these were a $100,000 gift from The Beinecke Foundation, Inc., and a gift totaling $50,000 from Agnes Gund, former President of the Board of the Museum of Modern Art, which will also be used to support Archives' operations. The Archives also received a gift of $12,000 from the Gerta Charitable Trust for the processing, microfilming, and publication of a finding aid to the Marcel Breuer papers.

ARTHUR M. SACKLER GALLERY/FREER GALLERY OF ART

	APPLICATION OF OPERATING RESOURCES							
	FEDERAL APPROPRIATIONS		GENERAL TRUST		DONOR/SPONSOR DESIGNATED		GOV'T GRANTS & CONTRACTS	
	FTE	$000	FTE	$000	FTE	$000	FTE	$000
FY 1999 ACTUAL	77	6,077	0	466	46	5,549	0	0
FY 2000 ESTIMATE	77	6,059	0	340	46	5,370	0	0
FY 2001 ESTIMATE	77	6,250	0	390	46	6,048	0	0

ABSTRACT - The Arthur M. Sackler Gallery was founded in 1982 (opened to the public in 1987) to house a gift of Asian art from Dr. Arthur M. Sackler and to develop an active program of loan exhibitions. The Freer Gallery of Art, founded in 1906 (opened to the public in 1923) as the first art museum of the Smithsonian Institution, had its origin in Charles Lang Freer's gift to the Nation of Asian art and a specialized collection of American art. Both museums actively seek to study and celebrate the historical and contemporary achievements of the arts of Asia. Together they form the national museum of Asian art for the United States.

Administered by a single staff, the combined resources for the Freer and Sackler galleries form an important international center dedicated to ongoing collection, preservation, study, and exhibition of Asian art, as well as to educational programs that increase public awareness of the arts of Asia. While the Freer Gallery neither lends objects nor exhibits works borrowed from museums or individuals, the Sackler Gallery both lends from its collections and borrows works to augment its own holdings.

For FY 2001, the Smithsonian is not seeking additional funding for programmatic increases for the Arthur M. Sackler Gallery and the Freer Gallery of Art. The Institution requires $191,000 for Necessary Pay for existing staff funded in this line item.

PROGRAM - The Sackler and Freer galleries together focus on the artistic traditions of Asia. The Sackler Gallery extends this focus to the present day, embracing a wider range of media and artistic expression, while the Freer Gallery emphasizes the major historical artistic traditions from the beginnings of history through the 19th century. In addition to the Freer Gallery's program on American art and its interrelationship with Asian traditions, the major goal of the Freer and Sackler galleries together is to

expand both knowledge and appreciation of Asian artistic traditions through exhibitions, education, research, conservation, and acquisitions. In addition, the galleries, with the aid of a significant number of public programs related to the collections or exhibitions, provide wide cultural and physical contexts that aid in understanding the forms and complexities of Asian art. A continuing calendar of public programs explores both the living arts of Asia and in-depth aspects of individual Asian societies.

Exhibitions - Exhibitions provide the primary link between the public and the diverse cultures of Asia. Exhibitions at the Sackler Gallery draw from public and private collections. FY 2000 exhibitions include *Treasures from the Royal Tombs of Ur*, a look at royal life and death in the Sumerian city state of Ur nearly 5,000 years ago, and *Imaging the Word: Selections of Calligraphy from the Islamic World*, recent purchases, gifts and loans of Islamic calligraphy from the 9th to the 20th century. *Constructing Identities: Recent Work by Jananne al-Ani* included 4-x-6-foot photographs and a related slide projection addressing the provocative issue of Orientalism, especially the representation of women in the Orient. Two others are *Antoin Sevruguin and the Persian Image,* an important pictorial record of pre-modern Persian social history and visual culture, and *Music in the Age of Confucius*, an exploration of the social, cultural and musical meanings of the oldest-known (500 B.C.E.) examples of ancient musical instruments that were discovered in China in the late 20th century. FY 2001 exhibitions will include *The Hauge Gift of Asian Ceramics* (ancient and mostly Middle Eastern); *India Through the Lens: Photography 1840-1911*; *Recording Persepolis 1931-1935*; and *Worshiping Ancestors: Ritual and Commemorative Portraits in Late Imperial China*. At the Freer Gallery, regularly changing exhibitions occur throughout the year featuring presentations that draw from the rich resources of the Gallery's collections. In-depth, small, focused exhibitions such as *The Idea of China in Japanese Art* and *The Dragon's Moan*, featuring 3 qin representing the qin in its classical form as it evolved from the ancient prototype, are hallmarks of Freer exhibitions.

Education - The staff develops, in a variety of media, curriculum materials that are related to the national collections and loaned exhibitions. These materials are distributed nationally. Public programs for both galleries reach out to varied and diverse audiences as a way to develop and expand the participation in the museum and to enhance the collections and exhibitions by means of film, family programs, Asian music and dance, chamber music, and lectures. Teacher workshops and teacher in-service programs are conducted locally and nationally. The museum's website features resources specifically developed for teachers, including programs

and materials for use in the classroom. The website also provides programs for families, including online activities for children.

Research - The Freer and Sackler Galleries share research staff and support facilities that together constitute an international center for advanced scholarly research in Asian art, as well as in specific areas of American art in the Freer Gallery. Research provides the basis for exhibitions, publications, and collections acquisitions. The galleries disseminate research results to the public through lectures, symposia, collections research files, book-length studies, translations, monographs, exhibitions, exhibition catalogues, gallery guides, and brochures.

Conservation - Treatment of the collection continues in order to ensure and improve the physical well-being of the objects. Conservation research, which uses scientific methods to determine and explain the origins and physical nature of works of art, is carried out in tandem with the galleries' overall research effort and facilitates the care and treatment of the collections.

Collections - In FY 1999, the two galleries together acquired 363 objects for the collections. Among these acquisitions were important collections of 5th- to 1st-century B.C.E. Iranian and Iraqi earthenware vessels; a 13th-century Kameyama-ware jar from Japan's Kameyama kiln complex; a 17th-century illustrated album page to a *Ragamala*; and an Iranian charger from the Timurid (15th century) period.

Publications - The publications program of the Freer and Sackler galleries encompasses exhibition-related books and catalogues; *Asian Art & Culture,* a collateral book series; *Occasional Papers*, a series of substantial scholarly papers; collections catalogues; educational materials for teachers; a calendar of events; and numerous brochures and gallery guides.

NONAPPROPRIATED RESOURCES - General Trust funds are generated from memberships, museum shop sales, special events, unrestricted and restricted gifts and grants, and endowment income. This income provides support for salaries and benefits for certain personnel, fund raising activities, various programmatic activities, scholarly research, and collection acquisitions.

CENTER FOR FOLKLIFE AND CULTURAL HERITAGE

	APPLICATION OF OPERATING RESOURCES							
	FEDERAL APPROPRIATIONS		GENERAL TRUST		DONOR/SPONSOR DESIGNATED		GOV'T GRANTS & CONTRACTS	
	FTE	$000	FTE	$000	FTE	$000	FTE	$000
FY 1999 ACTUAL	14	1,746	14	1,098	0	1,137	0	0
FY 2000 ESTIMATE	14	1,750	14	1,054	0	1,125	0	0
FY 2001 ESTIMATE	14	1,798	15	1,154	0	700	0	0

ABSTRACT - The Center for Folklife and Cultural Heritage conducts scholarly research and public programs that promote understanding and continuity of traditional grass roots regional, ethnic, tribal, and occupational heritage in the United States and abroad. The Center maintains the Ralph Rinzler Folklife Archives and Collections and produces the annual Smithsonian Folklife Festival; Smithsonian Folkways Recordings; documentary films, videos, and print publications; training programs and educational materials; and museum and traveling exhibitions. The Center cooperates with Federal and state agencies to advance the Nation's interest in cultural matters.

For FY 2001, the Smithsonian is not seeking additional funding for programmatic increases for the Center for Folklife and Cultural Heritage. The Institution requires $48,000 for Necessary Pay for existing staff funded in this line item.

PROGRAM - **Research** - Research projects document and study the continuing practice of local traditions among diverse communities in contemporary society. Current projects examine the relationship between culture and grassroots economic development; cultures of immigrants to the United States; traditional builders; and cultural traditions in the Mississippi Delta, New York City, Washington DC, and United States/Mexico borderlands. Center staff work with teams of researchers from local communities and generate documentation for the collections. Center scholars research American regional music; American craftspersons; the cultural impact of technological change; urban Latino culture; and African American, Asian American, and Native American traditions.

Smithsonian Folklife Festival - The Smithsonian Folklife Festival, held outdoors on the National Mall for two weeks every summer since 1967, educates a broad public about American and human cultural heritage and encourages tradition bearers by giving national recognition to their artistry, knowledge, and wisdom. The Festival provides a national and international model for the research-based presentation of cultural traditions. Over one million people visit the Festival each year, and millions more are reached by media coverage. In addition, the Festival produces programs on selected topics for the World Wide Web. In 1999, the Festival featured New Hampshire, South Africa, and Romania. In 2000, the Festival will feature Washington DC, Tibetan culture, and a Rio Grande Basin program.

Archives and Collections - The Rinzler Archives and Collections contains audiotapes, records, videotapes, photographic images, film, and paper files documenting cultural traditions from all parts of the United States and most regions of the world. Holdings include the original master recordings of Woody Guthrie performing *This Land is Your Land* and original master tapes of Dr. Martin Luther King, Jr., as well as speeches and songs of major cultural importance. The collection contains documentation of music, occupational lore, family folklore and immigration stories. The Archives contains research documentation for the Festival, as well as sound recordings from Folkways and other recording companies.

Smithsonian Folkways Recordings - Folkways Recordings includes the recordings of such American icons as Woody Guthrie, Leadbelly, Sonny Terry, Josh White, Mary Lou Williams, Mahalia Jackson, Bob Dylan, Albert Einstein, Margaret Mead, Langston Hughes, and thousands of others. Folkways annually produces 20-25 documentary recordings of American and worldwide music, performance, and verbal arts for retail and educational markets, and makes audio clips and data on its collection available to the public through the Center's homepage on the Smithsonian website. Folkways received two Grammy awards in 1998 for the *Anthology of American Folk Music*. In 1999 recordings of Franco American, Mexican American and African American music were released and two independent record labels were donated to Folkways.

Publications and Documentary Films - The Smithsonian Folklife Studies series consists of scholarly monographs coupled with documentary films, most of which are released to colleges and universities. Videos such as *Wisconsin Powwow* and *Workers of the White House* are distributed to schools and aired on public television. In 1999 Center staff published three books, including *Creating a Latino Identity in the Nation's Capital*, and produced *Earl's Canoe*, a film about an American Indian canoe builder, which was awarded a CINE Gold Eagle.

Training Programs and Educational Materials - The Center develops curriculum materials and offers teacher training for understanding American cultural traditions. Teacher and student guides, recordings, and videotapes have been developed in partnership with state education departments and organizations in Hawaii, Iowa, Wisconsin, and New Hampshire, among many others. A multimedia kit on traditions of the Mississippi Delta will be distributed in 2000.

Traveling Exhibitions - The Center cooperates with the Smithsonian Institution Traveling Exhibition Service to produce modest traveling exhibitions developed from research and Festival programs. Exhibits on the music of Woody Guthrie and on Maroon cultures of the Southern United States and the Caribbean are traveling in 1999. A major exhibit of American folk art, *Spirited Objects*, will tour U.S. cities in 2001.

Public Service - The Center collaborates with economic development, tourism, culture, and education departments of states to develop Festival programs and remount them "back home." The New Hampshire program, first mounted on the National Mall in 1999, will be restaged in Hopkinton, New Hampshire in May 2000. The Festival of Michigan Folklife, based on a 1988 program on the National Mall, continues on an annual basis in East Lansing. These programs catalyze local cultural efforts and include the development of educational materials and the sharing of archives.

NONAPPROPRIATED RESOURCES - General Trust funds provide support for salaries and benefits of personnel, fund raising, and general program support. Donor/sponsor designated funds provide support for costs related to specific programs and projects. Income from sales of Smithsonian Folkways Recordings pays staff salaries, as well as direct and indirect costs.

COOPER-HEWITT, NATIONAL DESIGN MUSEUM

	APPLICATION OF OPERATING RESOURCES							
	FEDERAL APPROPRIATIONS		GENERAL TRUST		DONOR/SPONSOR DESIGNATED		GOV'T GRANTS & CONTRACTS	
	FTE	$000	FTE	$000	FTE	$000	FTE	$000
FY 1999 ACTUAL	43	2,784	26	2,631	1	1,327	0	17
FY 2000 ESTIMATE	43	2,866	31	2,957	3	4,311	0	0
FY 2001 ESTIMATE	43	2,970	32	2,974	4	2,461	0	0

ABSTRACT - Cooper-Hewitt, National Design Museum explores the creation and consequences of the designed environment. Design, a process of shaping matter to a purpose, is a fundamental activity. The National Design Museum investigates the structures and effects of these products of design and their roles as forces for communication and change. The Museum is interested in all aspects of design, including urban planning, architecture, industrial design, landscape design, interior design, textiles, advertising, and graphic arts. It is a public trust founded on the principle that understanding the past and present will shape the future. Today the scale and pace of change require a new understanding—one that recognizes that individuals, societies, and the natural environment are linked through design.

For FY 2001, the Smithsonian is not seeking additional funding for programmatic increases for Cooper-Hewitt, National Design Museum. The Institution requires $104,000 for Necessary Pay for existing staff funded by this line item.

PROGRAM - Cooper-Hewitt, National Design Museum, is the only museum in America devoted exclusively to historical and contemporary design. The Museum pursues its mission through exhibitions, publications, provisions for collections study, and research, as well as educational programs for design professionals, the adult public, and schoolchildren. In addition, the Museum jointly offers with the Parsons School of Design a master's degree program in the history of decorative arts.

Renovation - During 1999, the Museum began the renovation of the 4th floor of the Carnegie Mansion, which houses the Museum's Drawings and Prints collection. This undertaking is the final phase of a $20 million accessibility and renovation project, and will result in the opening in 2001

of the renovated Drue Heinz Study Center for Drawings and Prints, and the new Henry Luce Study Room for American Art.

Exhibitions - Highlights of the Museum's FY 1999 schedule included *The Architecture of Reassurance: Designing the Disney Theme Parks,* which explored the influence of the Disney theme parks and was the first major public exhibition to feature drawings, photographs, models and videos from the Walt Disney Imagineering Collection. *Unlimited by Design* featured 150 contemporary products, services and environments at the forefront of universal design—design that seeks to enhance the daily activities of the greatest number of people. *Graphic Design in the Mechanical Age: Selections from the Merrill C. Berman Collection* featured over 200 works of graphic design produced by the avant-garde in the early twentieth century. *The Huguenot Legacy: English Silver 1680-1760* showcased the domestic silver produced in the workshops of Huguenot silversmiths active in London from the late seventeenth century to the middle of the eighteenth century. *El Nuevo Mundo/The New World: The Landscape of Latino LA* presented 104 photographs by Camilo José Vergara that documented the cultural and physical transformations in Los Angeles County as its population has become increasingly Latino. *The Window Show* was a unique collaboration between the Museum and fifteen of Manhattan's most prestigious retail establishments, in which a prominent window of each store became a satellite gallery for the window designer's interpretation of an object from the Museum's collection.

Collections Activity - More than 1,053 objects were added to the collections in FY 1999. A total of 179 objects were loaned to a variety of institutions for exhibition, conservation, and study purposes and 872 objects were borrowed for exhibitions from museums and private lenders. During the fiscal year the Museum acquired several objects designed and produced by members of the Vienna Weiner Werkstatte early in the twentieth century. These items included a glass cup and saucer (1907) designed by Otto Prutscher (1918-1949), and two examples of bobbin lace and a length of printed fabric designed by Franz von Zulow (1883-1963) which matched a design already in the Museum.

Educational Programs - Some of the highlights of the Museum's school programs included Design Career Days focusing on the design of the Disney theme parks with designers from Walt Disney Imagineering, and a Studio After School program on feature film production design. Highlights of the adult programs included a lecture by Roy Disney, a panel discussion featuring prominent architects and designers on kitchen design, and a series of lectures and concerts celebrating Mexican and Mexican-inspired music and dance.

Research - The Museum's Library receives approximately 250 queries per month from scholars, private individuals, designers, and corporate interests. About 2,000 people visit the Library each year.

NONAPPROPRIATED RESOURCES - The Museum's General Trust funds are generated from membership, museum shop sales, admissions, special events and unrestricted donations, and these revenues support exhibitions, publications, and general operating expenses. Donor/Sponsor Designated funds provide support for specific programs and projects. Government grants and contracts provide support for research.

HIRSHHORN MUSEUM AND SCULPTURE GARDEN

	APPLICATION OF OPERATING RESOURCES							
	FEDERAL APPROPRIATIONS		GENERAL TRUST		DONOR/SPONSOR DESIGNATED		GOV'T GRANTS & CONTRACTS	
	FTE	$000	FTE	$000	FTE	$000	FTE	$000
FY 1999 ACTUAL	71	4,461	1	573	0	3,920	0	0
FY 2000 ESTIMATE	71	4,615	1	1,380	2	4,466	0	0
FY 2001 ESTIMATE	71	4,766	3	667	3	3,490	0	0

ABSTRACT - The Hirshhorn Museum and Sculpture Garden (HMSG) is dedicated to developing a greater public understanding and appreciation of modern and contemporary art through the collection, preservation, study, exhibition, and interpretation of modern and contemporary works of fine art.

For FY 2001, the Smithsonian is not seeking additional funding for programmatic increases for the Hirshhorn Museum and Sculpture Garden. The Institution requires $151,000 for Necessary Pay for existing staff funded in this line item.

PROGRAM - The Hirshhorn Museum and Sculpture Garden celebrated its 25th anniversary in 1999. The Museum continues to serve its regional, national and international visitors by developing and furthering a greater public understanding and appreciation of modern and contemporary art through acquisition, exhibition, public programs, and collections management, including conservation, and research.

Acquisitions - During FY 1999, the Museum acquired, among other works, Yves Klein's painting, *Untitled Anthropometry (ANT 100)*, 1960; Mark di Suvero's monumental sculpture, *Are Years What? (For Marianne Moore)*, 1967; Jeff Koons' chrome-plated sculpture, *Kiepenkerl*, 1987; and Gerhard Richter's painting, *Waterfall*, 1997. These works bring the Hirshhorn Museum and Sculpture Garden collection to more than 11,700 objects.

Exhibitions - The Museum presents six changing exhibitions per year, in addition to exhibitions of its permanent collection. The exhibition program includes three large exhibitions produced by the Museum's own staff or loan exhibitions from other museums, and three *Directions*

exhibitions, one-gallery presentations featuring the work of individual contemporary artists. The Hirshhorn opened the FY 2000 season with its 25th anniversary exhibition *Regarding Beauty: A View of the Late Twentieth Century,* curated by Museum staff. That exhibition will be followed by *Robert Gober: Sculpture and Drawing,* organized by the Walker Art Center; *Dali: Optical Illusions,* organized by the Wadsworth Atheneum; and *Edward Ruscha,* which is being organized by the Hirshhorn in conjunction with the Museum of Modern Art, Oxford, England. The exhibition will travel to the Museum of Contemporary Art, Chicago; the Miami Art Museum; and the Museum of Modern Art, Fort Worth, as well as Oxford. The *Directions* series will feature the works of Shazia Sikander, Leonardo Drew, and Cathy de Monchaux, artists from Pakistan, the United States, and England, respectively. Major projects under development will feature the work of American painter Clyfford Still, South African artist William Kentridge, and Spanish sculptor Juan Muñoz.

The Museum interprets its collections and exhibitions through daily gallery tours, elementary-age, family and adult programs, film, lectures, and teachers' workshops. In FY 1999, the Hirshhorn introduced the redesign of its expanded calendar and enhanced its Young at Art program to include Improv Art, a drop-in program for elementary-aged children and their families. Tours for the sight-impaired were reinstituted and an Art Explorers Workshop for Adults was also offered for the first time. All Museum publications (brochures and catalogs) are available in audio, large print, and Braille format, upon request. In addition to exhibition brochures for each exhibition, the Museum also produced an exhibition catalog, *Regarding Beauty: A View of the Late Twentieth Century*, to accompany the exhibition of the same name.

Collections Management - The Museum prepared for the move of its print collection in 2000 to renovated space in the Museum's painting storage area. This move will not only consolidate collections storage but will free some necessary office space. The Museum System (TMS) database was fully implemented in 1999 and staff now have online access to current information about all Smithsonian art collections at their desks. Addition of archival information about the collection continued and staff began to add scanned images of collection objects to the database. Both projects will continue through FY 2000.

Research - Research activity continues to focus on future exhibitions (Edward Ruscha, William Kentridge, Clyfford Still, Juan Muñoz) and the concomitant publications that will be produced. In addition, staff pursued research on Georgia O'Keeffe watercolors, Raymond Duchamp-Villon and

the American Avant-garde, Willem deKooning, Elie Nadelman, Magdalena Abakanowicz, and Thomas Eakins' photographs in the Hirshhorn collection.

NON-APPROPRIATED RESOURCES - General Trust funds provide support for salaries and benefits of personnel and related travel costs. In addition, these funds provide general support for exhibitions, public programs, and fund raising (including the Museum's first Donor Recognition Board). Donor/Sponsor Designated funds provided support for costs related to specific programs and projects, such as collections acquisitions; public programs such as the Young at Art program for children and families; exhibitions such as the 25th anniversary exhibition held in the fall of 1999 and entitled, *Regarding Beauty: A View of the Late Twentieth Century*; and the establishment of the Museum's first Development Office. The Hirshhorn's first gala fund-raising benefit, *A Celebration of Art*—a dinner/dance which benefited the Museum's exhibitions and public programs—not only raised the Museum's public profile and introduced a new constituency to the Museum, but also yielded much-needed support for the Hirshhorn.

NATIONAL AIR AND SPACE MUSEUM

	APPLICATION OF OPERATING RESOURCES							
	FEDERAL APPROPRIATIONS		GENERAL TRUST		DONOR/SPONSOR DESIGNATED		GOV'T GRANTS & CONTRACTS	
	FTE	$000	FTE	$000	FTE	$000	FTE	$000
FY 1999 ACTUAL	214	12,574	37	3,333	20	4,502	25	338
FY 2000 ESTIMATE	214	13,228	36	6,324	20	5,837	25	300
FY 2001 ESTIMATE	233	16,317	37	1,584	18	107,136	25	138

ABSTRACT - The mission of the National Air and Space Museum (NASM) is to memorialize the national development of aviation and space flight. It serves as the repository for, preserves, and displays aeronautical and space flight equipment and data of historical interest and significance to the progress of aviation and space flight. The Museum provides educational materials and performs the necessary research for the study of aviation and space flight and their related technologies. In addition to its Mall location, NASM maintains the Paul E. Garber Preservation, Restoration and Storage Facility in Suitland, Maryland. Design work continues on the Dulles Center in Virginia which will house the Museum's collection and restoration facilities, enabling the Museum to exhibit much more of its collection, including its largest aircraft and spacecraft.

For FY 2001, the Smithsonian requests $2,580,000 and 19 term positions for collections preparation and program planning for the Dulles Center. The Institution requires $509,000 for Necessary Pay for existing staff funded in this line item.

PROGRAM - During FY 1999, NASM had over 10 million visitors and its website was accessed between five and six million times per month.

Research - During 1999, curators and researchers at the Museum presented the results of historical and scientific research at several meetings and conferences, such as the Society for the History of Technology and the American Geophysical Union. The curatorial staff took a lead role in organizing the 50th Anniversary of NATO Conference and a National Aerospace Conference. In addition to monographs, results published in the scientific literature include discussions of the causes of dark terrain in the highlands of Venus, the newly determined contraction

measurements of Mercury, the origin of desert dunes in the Mojave, and the timing of flooding in central Australia.

Collections Management - During FY 1999, the first 25 NASM employees were trained on the new Collections Management Information System, and all the original Smithsonian mainframe-based collection files were converted and moved into the system, along with over 17,000 of the original images and documents.

Preservation and Restoration – In FY 1999, work continued on the Aichi Seiran, the Hawker Hurricane, the SA-2 surface to air missile and transporter, the S-1 Pitts Special *Little Stinker*, and the Nieuport 28. These major aircraft projects range from 92% to 100% completed. The engine preservation project is over 60% complete, with 145 of 240 engines mounted, preserved and ready for transfer to the Dulles Center. The MiG-15, a Korean-War period Soviet fighter, is being preserved in preparation for the move to the Dulles Center. During the summer of 1999, the aft fuselage of the Enola Gay was moved into the shop to complete restoration of the aircraft, and the final painting is underway. Also in 1999, the Museum completed the cleaning and transfer of 35 large artifacts and well over 1,500 smaller ones from an asbestos-contaminated storage area to a safer area within the Garber Facility. In August 1999, staff traveled to Lucerne, Switzerland and prepared the Breitling Orbiter 3 for transport to NASM. A flown Spacelab module and related components were acquired and transported from the National Aeronautics and Space Administration to NASM.

Publications and Electronic Outreach - In FY 1999, NASM published Tom Crouch's *Aiming for the Stars: The Dreamers and Doers of the Space Age* (Smithsonian Institution Press). Also, *A History of Modern Computing* by NASM curator Paul Ceruzzi was published by MIT Press. The Museum's heavily visited website continued to expand its online information, educational activities, resources, and information on public programs and special events. Special features added include a new educational resources area, a live web camera in the artifact restoration shop, increased information on the planned Dulles Center facility, and, in conjunction with the 30th anniversary of the Apollo 11, an online exhibition, events, and resources, including the new virtual gallery, *Apollo to the Moon*.

Exhibitions - In October 1999, a new show, *And a Star to Steer Her By*, opened in the Planetarium. It explores the tools used—from stars to satellites—to meet the challenges of navigation. Complementing the planetarium show is *GPS: A New Constellation,* a new exhibition that explores the Global Positioning System, the most significant recent advance

in technology for determining position. Two temporary exhibitions were added to *Space Race* in June. One, *The Soviet Challenge in Space: Illustrating the Threat* is a display of 12 paintings created for the Defense Intelligence Agency to illustrate Soviet weapons systems and advanced technology during the Cold War. The other, the Faint Object Spectrograph (FOS) was part of the Hubble Space Telescope when it was launched in 1990 and was retrieved by Space Shuttle astronauts during a servicing mission in 1997. The gondola from the Breitling Orbiter 3, which in 1999 became the first balloon to complete a nonstop flight around the world, was added to *Milestones of Flight* in September. Planning and development work continued on several other major projects, notably *Explore the Universe,* the redesigned Air Transportation Hall, the new IMAX® film, *Up, Up, and Away,* and the design of the Dulles Center. Presented in a state-of-the-art digital theater, the exhibition *Earth Today* is updated several times daily to show near real-time satellite views of the Earth's atmosphere, oceans, and land masses.

Education - During FY 1999, NASM started a new, national education program on remote sensing and air transportation. As part of the remote sensing *Reflections on Earth* program, a teaching poster that helps students understand the use of space technology in the study of the Earth and its environment was distributed to 40,000 middle schools. On Discover the Moon Day, a variety of educational activities was presented to commemorate the 30th anniversary of the Apollo 11 landing on the Moon. In celebration of National Geography Awareness Week, visitors participated in the popular *Geography from Space*, an activity that lets them identify various geographic land formations from space photos. Educational Services collaborated with the Smithsonian Center for Education and Museum Studies and two universities to offer 10 teacher workshops for 227 teachers. Two family programs—NASM's general population outreach Family Nights, and the Challenger Center's Family Science Nights—had more than 6,000 participants. Education staff exhibited at the National Science Teachers Association and the Smithsonian Teachers' Night, expanded the education homepage and produced the School Program Guide.

Dulles Center - In FY 1999, significant progress was made on the Dulles Center. The design is 100 percent complete, the Commonwealth of Virginia will release the initial site preparation work contracts in spring 2000, the 50-year lease with the Metropolitan Washington Airports Authority was signed, and construction fund raising is ahead of schedule, having achieved more than 70 percent of goal. A working artifact layout has been developed using CAD/CAM systems and the exhibit kiosks have been designed.

EXPLANATION OF PROGRAM CHANGE - The Institution requests an increase of $2,580,000 and 19 term positions in FY 2001 in support of collections management and program planning for the opening of the new Dulles Center in 2003.

The National Air and Space Museum—Dulles Center will house, display and provide a facility for restoration and preservation of the majority of the Smithsonian Institution's air and space-related artifacts. At the Dulles Center, these artifacts will be accessible to current and future generations of museum visitors and will form the basis for aviation and space education programs. The new Dulles Center will provide museum-quality housing for objects in NASM's collection not on public display on the Mall and provide public access to most of these collections.

NASM's most urgent need is to prepare the collection for transfer to the new facility. At this time there are thousands of artifacts disassembled and packed in crates that must be inspected, inventoried and conserved. Of the requested increase, 15 positions and $1,166,000 (of which $263,000 is one-time) are needed to prepare the aircraft, spacecraft and related artifacts for the move to the Dulles Center. This is a labor-intensive effort that cannot be met by contractual support. The requested funds will be used to obtain expertise and equipment required for air and space collections management, restoration, and transport. The initial focus will be to inventory, document and ascertain the stored collection's status. In conjunction with that effort will be conservation of key artifacts planned for display at the Dulles Center.

Equally as important is planning the Dulles Center's educational and public programs. One position and $82,000 are needed to begin preparing the educational and outreach programs for the Center in the sciences and history. This position will develop the national and regional educational partnerships that will establish a major component of the Center, and result in a comprehensive program. Two positions and $118,000, along with $1,136,000 for one-time expenses, are required for the extensive design and testing needed in order to provide sufficient time to contract and build the exhibit systems for the Center's opening. Finally, one position and $78,000 are needed for additional contract management support, as the Dulles Center examines outsourcing support operations.

These funds are vitally needed to prevent further deterioration of one of the world's most valuable and irreplaceable collections of artifacts representing the history of aviation and space flight. These funds will also serve to educate students throughout the country on the science and

history that have made air and space flight possible. This initial investment in collection preservation and education will ensure that the national air and space treasures will be available for future generations.

NONAPPROPRIATED RESOURCES - General Trust funds provide support for research activities, educational programs, exhibitions, and fund raising, including the associated personnel salaries and benefits. Donor/Sponsor Designated funds provide support for costs related to specific programs and projects, such as research, exhibitions, collections care, and education programs. The Dulles Center capital campaign is raising the funds to build the museum extension, and has received the $60,000,000 gift from Steven Udvar-Hazy as a kick-off of the $130,000,000 campaign. Government Grants and Contracts provide support for research and other scientific activities.

NATIONAL MUSEUM OF AFRICAN ART

	APPLICATION OF OPERATING RESOURCES							
	FEDERAL APPROPRIATIONS		GENERAL TRUST		DONOR/SPONSOR DESIGNATED		GOV'T GRANTS & CONTRACTS	
	FTE	$000	FTE	$000	FTE	$000	FTE	$000
FY 1999 ACTUAL	54	4,071	1	316	0	43	0	0
FY 2000 ESTIMATE	54	4,253	2	440	0	42	0	0
FY 2001 ESTIMATE	54	4,365	2	407	0	130	0	0

ABSTRACT - As a leading center for the visual arts of Africa, the National Museum of African Art (NMAfA) fosters and sustains through exhibitions, collections, research, and public programs an interest in and an understanding of that continent's diverse cultures. The Museum's collection represents the visual arts of the entire continent, crossing time from the ancient through the contemporary.

For FY 2001, the Smithsonian is not seeking additional funding for programmatic increases for the national Museum of African Art. The Institution requires $112,000 for Necessary Pay for existing staff funded in this line item.

PROGRAM - The National Museum of African Art educates and instills an appreciation for the cultures and visual arts of Africa through the acquisition, care, research, exhibition and interpretation of works of art in the context of African history, culture and aesthetics.

Research - In FY 1999, in addition to research on proposed acquisitions, curatorial staff conducted research on South African contemporary art, children's masquerades, African adornment, and other collection-related subjects. A collections-based research grant supported research in South Africa on the work and career of photographer Constance Stuart Larrabee that will result in a publication. Conservation staff conducted research on concrete deterioration and devised a treatment protocol for four contemporary, figurative concrete screens.

Collections Management - During FY 1999, NMAfA expanded its implementation of The Museum System, NMAfA's collections information system. Also, the Museum began implementation of its main storage renovation project, the goal of which is to utilize efficiently available

storage space to house the aggressively expanding collection of both classical and modern African art. The Museum deaccessioned 35 bronzes by Jacob Epstein, netting more than $250,000 for future acquisitions. The Eliot Elisofon Photographic Archives, a research and reference center for visual materials, had preservation negatives made for 400 vintage prints in two historic photographic albums and 4,930 study prints made from negatives in the Constance Stuart Larrabee collections. The Archives added about 6,000 images of collections objects, installations and events to its collection.

Collection Acquisitions - In FY 1999, the Museum added 63 important works to its permanent collection through gift and purchase. Highlights among the gifts were a collection of early Zulu beadwork and a Baga *d'mba* mask (ca. 1925) from Guinea. Purchases included a rare set of early 20th-century, polychrome Nkanu initiation wall panels; an Mbala maternity figure from the Democratic Republic of the Congo; and a cast bronze abstract figure by South African artist Ezrom Legae (1938-1999). The Elisofon Archives added a total of 8,531 historic and contemporary images to its holdings.

Exhibitions/Public Programs/Education - During FY 1999, NMAfA presented seven temporary exhibitions. Among them were *South Africa, 1936-1949: Photographs by Constance Stuart Larrabee*; *New Acquisitions: Gifts from the Lawrence Gussman Collection*; and *Baule: African Art/Western Eyes*, which contrasted how Baule experience their art with how Western museums have presented them. *Sokari Douglas Camp: Church Ede, A Tribute to Her Father* presented a monumental kinetic funerary sculpture from the Museum's collection; *Hats Off! A Salute to African Headwear* and *Claiming Art/Reclaiming Space: Post-Apartheid Art from South Africa* presented works from the permanent collection. *Wrapped in Pride: Ghanaian Kente and African American Identity* was a collaborative presentation with the Anacostia Museum and Center for African American History and Culture. Smaller exhibitions of kinetic sculpture and African ceramics augmented the Museum's four permanent gallery installations.

The Museum complements its exhibition program and interprets its collection through a lively program of gallery tours, lectures, school programs, workshops for teachers and youth, outreach programs, and conservation clinics. In FY 1999, NMAfA offered more than 1,500 public programs serving 33,000 individuals. *Great African Films of the 90s*, co-sponsored by the Arthur M. Sackler Gallery/Freer Gallery of Art, included an international panel discussion on the future of African cinema in North America. *South African Cinema: Past, Present and Future* and 5 films from

Côte d'Ivoire were also presented. A Family Day, held in conjunction with the *Wrapped in Pride* exhibition, presented Ghanaian food, song, dance and other activities. Hands-on learning activities were incorporated into both the *Hats Off!* and *Wrapped in Pride* exhibitions. The Museum continues to refine its website and include electronic versions of each of its exhibitions.

Publications - In FY 1999, the Museum published *Olowe of Ise: A Yoruba Sculptor to Kings*, the first monograph including a catalogue raisonné of a traditional African artist. The Museum produced booklets, brochures, and flyers for its exhibitions and a *Family Guide* activity booklet for the *Wrapped in Pride* exhibition. NMAfA also produced program notes for the music and film programs as well as slide kits for teacher workshops. The Museum's *Educational Programs* brochure, published annually, continues to have wide local and national distribution.

NONAPPROPRIATED RESOURCES - General Trust funds provide support for the director's salary, benefits, and travel, as well as general operations, exhibitions and related public programs, collections acquisitions, and fund raising. Funds from the Smithsonian's Collections Acquisitions Program supported the purchase of an Mbala maternity figure. The Special Exhibition Fund supported both the Kente and Baule exhibitions. Donor/Sponsor Designated funds provided support for a publication as well as publicity and programming related to the Kente exhibition. A collections-based research grant funded research in South Africa.

NATIONAL MUSEUM OF AMERICAN ART

	APPLICATION OF OPERATING RESOURCES							
	FEDERAL APPROPRIATIONS		GENERAL TRUST		DONOR/SPONSOR DESIGNATED		GOV'T GRANTS & CONTRACTS	
	FTE	$000	FTE	$000	FTE	$000	FTE	$000
FY 1999 ACTUAL	123	8,252	9	1,256	4	2,120	0	0
FY 2000 ESTIMATE	123	8,624	11	1,122	4	3,900	0	0
FY 2001 ESTIMATE	123	8,929	11	1,265	6	3,385	0	0

ABSTRACT - The National Museum of American Art (NMAA) is the Nation's museum dedicated to the arts and artists of the United States from colonial times to the present. The Museum promotes art as a source of enrichment for general audiences and scholars alike and serves as a resource in the broadest possible sense for American visual arts. The Museum's programs make American art available to national audiences and beyond, as well as to those who visit its two historic landmark buildings in Washington DC. Outreach takes the form of circulating exhibitions, educational materials, publications, automated research resources, and a vast and growing offering of online and educational services which reflect the diversity of the country's citizenry and art.

For FY 2001, the Smithsonian is not seeking additional funding for programmatic increases for the National Museum of American Art. The Institution requires $305,000 for Necessary Pay for existing staff funded in this line item.

PROGRAM - NMAA stimulates an understanding of American visual expression in its broadest contexts through interpretive exhibitions; publications; online, print, and media outreach; and public programs. As a national institution, NMAA explores and serves the heritage of diverse communities in the United States.

Research - Thirteen scholars-in-residence enjoy research privileges through fellowships awarded for the 1999-2000 academic year. During FY 1999, the public made over 112,000 searches to the Art Inventories through the Smithsonian Research Information System (SIRIS), up considerably from the 67,000 searches reported the previous year. The Museum's popular online reference service, *Joan-of-Art*, answers an

average of 400 questions per month from the public on questions in American art.

Collections - The Museum's collections of approximately 38,000 objects encompass painting, sculpture, graphic art, photography, and folk art, as well as modern crafts at its Renwick Gallery. NMAA's most important acquisition during the past year was Richard Diebenkorn's painting *Ocean Park #6*, an early example of this California artist's best known series of paintings. Other objects acquired in FY 1999 include a major painting by Horace Pippin and a collage by Romare Bearden, both of whom are among the country's most famous African American artists. An exquisite group of 94 nineteenth-century portrait miniatures by members of Philadelphia's Peale family and George Catlin, among others, was received as a bequest. NMAA also acquired significant works by several Latino artists, including landmark examples by Amalia Mesa-Bains and Judith Baca, as well as sculptures by Jesús Moroles and the folk artist Felix Lopez. Among the Renwick's notable acquisitions was *!Guerra!*, a flag-tapestry by the New Mexican Hispanic artist Arturo Sandoval.

Exhibitions - Highlights of FY 1999 exhibitions on view included *Picturing Old New England*, *Abbott Thayer*, and *Woodcuts by Hiratsuka*, a tribute to the life and art of a celebrated Japanese American artist. For FY 2000, *Edward Hopper: The Watercolors*, received great reviews and large audiences as NMAA's final exhibition before it closed for a three-year renovation. An extensive website called *An Edward Hopper Scrapbook* complemented this exhibition and its catalog. A major exhibition at the Renwick was *Daniel Brush: Gold without Boundaries*, which was publicized by the media nationwide, showcased on national television, and received the Smithsonian's Exhibition Award for Design and Installation.

After the Museum closed in January 2000, more than 500 of the Museum's best paintings and sculptures began a national tour in eight exhibitions to 70 venues under the title *Treasures to Go.* A media launch for this three-year national tour has generated strong national publicity, and ambitious plans are in place to generate interest in the Museum and the Smithsonian as the tour proceeds.

Publications - The Museum published two major catalogs in 1999. *Picturing Old New England: Image and Memory* chronicles the development of the region's identity from the Civil War through the close of World War II. *Edward Hopper: The Watercolors* is the companion book for an exhibition jointly organized by NMAA and the Montgomery Museum. The Museum continued to publish its journal, *American Art*, now offered both in print and online, which recently included discussions of Scheeler, Hassam, Rungius,

Warhol, Wyeth, and Thayer. Four gift books will accompany the *Treasures to Go* exhibitions.

National Outreach and Education - The Museum's largest outreach project, apart from the *Treasures to Go* tour, is entitled *Save Outdoor Sculpture!*—a multiyear project dedicated to encouraging preservation of the nation's outdoor monuments. Grant funding from Target Stores and the National Endowment for the Arts supported 57 awards to conserve public sculptures in 32 states and the District of Columbia, with 42 percent of the awards made to communities with populations below 100,000.

The Museum conceived and implemented a variety of multicultural public programs and educational projects to attract a broad range of visitors. The use of new Internet applications, the publication and distribution of interpretive materials, and visits to local institutions enhanced the Museum's continued distance-learning efforts.

NONAPPROPRIATED RESOURCES - General Trust funds provide support for salaries and benefits of personnel, fund raising, and other related costs. Donor/Sponsor Designated funds provide support for specific programs and projects. Exhibitions and education programs receive support from individuals, foundations, and corporations. In FY 1999, a significant gift was received from the Principal Financial Group to support the *Treasures to Go* exhibitions as they tour the United States while the Museum is closed for renovation.

NATIONAL MUSEUM OF AMERICAN HISTORY

	APPLICATION OF OPERATING RESOURCES							
	FEDERAL APPROPRIATIONS		GENERAL TRUST		DONOR/SPONSOR DESIGNATED		GOV'T GRANTS & CONTRACTS	
	FTE	$000	FTE	$000	FTE	$000	FTE	$000
FY 1999 ACTUAL	313	19,658	18	2,719	93	11,338	0	18
FY 2000 ESTIMATE	315	20,560	19	3,024	28	10,886	45	2,900
FY 2001 ESTIMATE	315	21,390	22	3,714	27	5,665	46	2,900

ABSTRACT - The National Museum of American History (NMAH) dedicates its collections and scholarship to inspiring a broader understanding of our nation and its many peoples. It creates learning opportunities, stimulates imaginations, and presents challenging ideas about the country's past. This mission statement serves as a guide to NMAH staff as they develop public programs, open new and update existing exhibitions, conduct research, and enrich the collections.

This line item also includes the National Postal Museum. Its mission is to preserve and interpret the material and intellectual heritage of postal communications and philately through its collections, exhibits, publications, and educational programs.

For FY 2001, the Smithsonian is not seeking additional funding for programmatic increases for the National Museum of American History or the National Postal Museum. The Institution requires $830,000 for Necessary Pay for existing staff funded in this line item.

PROGRAM - The following are highlights of the National Museum of American History's recent achievements.

Research and Publications - Extensive research led to many important publications in FY 1999, including *Between a Rock and a Hard Place: A History of American Sweatshops, 1820 to the Present* by Peter Liebhold and Harry Rubenstein; *The British Museum Encyclopedia of Native North America* by Rayna Green (with Melanie Fernandez); *Life In Republican Rome on its Coinage* by Elvira Clain-Stefanelli; and *Public History: Essays from the Field*, edited by James B. Gardner (with Peter S. LaPaglia). In partnership with the Salzburg Seminar, the Museum also launched a new research

initiative by bringing scholars together from around the world to share work on *Public History and National Identity*.

Collections - In FY 1999, the Museum received a wide array of objects and archival materials through donation, purchase, transfer, and bequest. They included objects and archival materials from Goya Foods, a rare 10-kopek note issued by the Russian American Fur Company in the 19th century, photographs by Richard Avedon and Fred Maroon, Alexander Fleming's penicillin mold, components of two supercomputers, seismology instruments of the Cold War period used to monitor nuclear tests, and a black leather outfit worn by Tejano singer Selena.

Collections Management - In FY 1999, renovation plans for the newly asbestos-abated Silver Hill Building 17 were completed, as were the plans for new roofing for Silver Hill Buildings 15, 16, and 18. Unfortunately, during recent work on building 18, elevated asbestos levels were detected, making the building inaccessible while the contamination is assessed. Approximately 700 objects requiring extensive pre-move documentation were transferred to the Museum Support Center. The Museum continued to convert collections information in existing automated systems to the new automated central collections information system, MultiMIMSY, and reached a system total of 150,000 records in the process. Deinstallation of NMAH's technology exhibit at the Arts & Industries Building was completed. The largest technology objects were loaned long-term to the National Museum of Industrial History in Bethlehem, Pennsylvania, as part of NMAH's first affiliation agreement. NMAH also contracted for a comprehensive preservation assessment of storage, housing, and general physical conditions of the armed forces history collection.

In FY 1999, the Star-Spangled Banner was taken off display and is undergoing conservation treatment in the special on-site conservation laboratory that has been constructed for this 30-x-34-foot artifact. This lab has a 50-foot window wall so visitors can see the work in process, as well as an exhibit in the adjoining space describing the flag's origin in the War of 1812, the creation of the poem that became the National Anthem, and the preservation project. Also in FY 1999, the project team produced a major website and with the History Channel, produced an hour-long documentary, including a teachers' manual distributed to 90,000 teachers all across the country. Plans call for reinstallation of the flag in an environmentally controlled enclosure with accompanying permanent exhibit and educational programs in late 2002. This project has been made part of the Save America's Treasures Program of the White House for their Millenium

initiative, and it inaugurates the Museum's Blueprint—its long-range program to improve public spaces and provide new exhibitions.

Exhibitions and Public Programs - Under the Blueprint program, the Museum opened *Communities in A Changing Nation*: *The Promise of 19th-Century America*, a well received exhibit which explores the promise and reality of life in the 1800s through the experiences of three different communities—factory owners and workers from Bridgeport, Connecticut; Jewish immigrants in Cincinnati, Ohio; and African Americans in the South Carolina low country.

The Story in History and *Our Story* were two new programs featuring children's literature and hands-on learning for families and at-risk school audiences. Both programs reflected new thinking about the benefits of teaching history through stories to school-aged children. The Museum's Lemelson Center for the Study of Invention and Innovation explored history, public policy, and technological innovation through a series of programs entitled *Inventing for the Environment.* The Museum also celebrated the centenary of Duke Ellington's birth with a special exhibition of historical photographs, the Duke Ellington Youth Art Project, and a series of concerts presented by the Smithsonian Jazz Masterworks Orchestra.

In early FY 2000, the Museum continued to advance its Blueprint program by opening *On Time*, a major new permanent exhibition that explores the changing ways Americans have measured, used, and thought about time over the last 300 years. The exhibition features more than 200 clocks, watches and other objects which demonstrate how and why we have come to equate time with the clock. *Fast Attacks and Boomers*, scheduled to open in the spring of 2000, represents the most recent addition to the Armed Forces Hall. The exhibition honors the centenary of the submarine and presents a detailed look at the role of submarines and their crews during the Cold War. The 300th anniversary of the piano will be noted by a display of rare and historic pianos from the Museum's collection in the S. Dillon Ripley Center, and an accompanying series of concerts, demonstrations, television specials, and gala performances.

In FY 2001, the Museum expects to unveil another significant element of its Blueprint plan by opening *American Legacies* and the Museum Welcome Center. The exhibition and the center are key elements in the Museum's plan to offer more comprehensive orientation to American history and to the collections. Also, in FY 2001 the Museum will recognize the 100th anniversary of the Nobel Prize through exhibitions and public programs which honor the accomplishments of American Nobel Prize winners.

National Postal Museum - FY 1999 marked a year of major exhibitions, including five variations of the Museum's *Posted Aboard RMS Titanic* exhibition. One version of the *Titanic* opened in Melbourne, Australia, while other variations were displayed in San Antonio, Texas; Chicago, Illinois; and Las Vegas, Nevada. The full *Titanic* exhibit opened at the National Postal Museum in September, 1999. Other new exhibitions included *As Precious as Gold*, which commemorates the centennial of the Klondike/Alaska Gold Rush, and *Mayhem by Mail*, which honors the United States Postal Inspection Service. The National Postal Museum also inaugurated two new award programs in FY 1999. The first Great American Post Office Award was presented to the citizens of Galena, Illinois, in recognition of having the nation's oldest government-owned postal facility. The other new award program honors Americans Making a Difference. The first award recipient was Buck O'Neil, who played and managed in the Negro Baseball League.

NONAPPROPRIATED RESOURCES - National Museum of American History General Trust funds provide support for salaries and benefits of personnel. In addition, these funds provide general support for research activities, conservation, publications, exhibitions, fund raising, and acquisitions. Donor/Sponsor Designated funds provide support for specific programs and projects, such as collections maintenance, special events, education programs, acquisitions and exhibitions. Government grants and contracts provided support for collections, exhibitions, and research.

The National Postal Museum receives annually major operating and program support from the United States Postal Service. These funds provide support for salaries and benefits of Trust fund employees, utilities and maintenance, security services, exhibitions, publications, fund raising, conservation, and public programs. Donor/Sponsor Designated funds provide support for specific programs and projects, such as special events, education programs, acquisitions, and exhibitions.

NATIONAL MUSEUM OF THE AMERICAN INDIAN

	APPLICATION OF OPERATING RESOURCES							
	FEDERAL APPROPRIATIONS		GENERAL TRUST		DONOR/SPONSOR DESIGNATED		GOV'T GRANTS & CONTRACTS	
	FTE	$000	FTE	$000	FTE	$000	FTE	$000
FY 1999 ACTUAL	224	13,761	5	1,411	1	3,406	0	62
FY 2000 ESTIMATE	235	22,090	6	1,403	2	541	0	6
FY 2001 ESTIMATE	270	31,175	6	1,181	2	584	0	0

ABSTRACT - The National Museum of the American Indian (NMAI), established in 1989 by Public Law 101-185, recognizes and affirms to Native American communities and the non-Native American public the historical and contemporary cultures and cultural achievements of the native peoples of the Western hemisphere. This is achieved through development and use of its collections and nationwide innovative public programming, research, and exhibitions executed in consultation with native peoples.

NMAI operates administrative offices in Washington DC, an exhibition center in New York City at the George Gustav Heye Center in the Alexander Hamilton U.S. Custom House, the Cultural Resources Center (CRC) in Suitland, Maryland, and the Research Branch located in the Bronx, New York. The Research Branch temporarily houses most of the Museum's collections. Beginning in March 1999, NMAI began to move its collection of 800,000 artifacts from New York to the newly constructed CRC in Suitland, Maryland. The CRC will house reference, collections, and program support for NMAI. A groundbreaking ceremony was held in September 1999 for the museum building on the Mall, which is planned to open in 2002.

For FY 2001, the Smithsonian requests $8,695,000 and 35 positions primarily for programmatic increases associated with the opening of the CRC in Maryland, moving collections from New York City to the CRC, and developing exhibitions and operations plans for NMAI's Mall museum. The Institution requests that the funds for this line item remain available until expended. The Institution requires $390,000 for Necessary Pay for existing staff funded in this line item.

PROGRAM - The Museum of the American Indian, located in New York City, opened its doors to the public in 1922. On June 24, 1990, the collection was transferred to the Smithsonian Institution to form the base of the National Museum of the American Indian. The collection, initiated near the turn of the century, is one of the world's largest assemblages of artifacts of the indigenous cultures of the Western Hemisphere.

Collections Management and Services - The Cultural Resources Center provides for the care and use of the Museum's collections including curatorial and conservation services, registration and collections management, photo and paper archives, photographic services, a resource center, and NMAI's research program. These services provide research and content development for the exhibitions for the Mall Museum and safe housing and documentation for the collection.

In FY 1999, 28,000 objects in the Museum's collection were moved from the Research Branch in New York to the CRC with priority on the artifacts needed for Mall exhibit planning and development. As part of the packing process, digital images are being produced to help create a new electronic catalog of the NMAI collection, and objects are also cleaned and stabilized.

Once objects are shelved and safely housed at the CRC, the staff will provide assistance to visiting scholars, tribal delegations, and interested public visitors who want to research the collection, including the library collection to be housed at the CRC.

Public Programs - The George Gustav Heye Center interprets the NMAI mission through daily gallery tours and demonstrations, elementary and secondary school programs, theatrical presentations, film and video screenings, festivals, symposia, art talks, and community outreach programs. At over 600,000 visits last year, attendance has far outpaced initial expectations, with the Heye Center now ranked as the sixth-most-visited museum in New York City. In addition, the interactive Resource Center seeks to remove the Museum's walls by reaching a global Internet audience through its website.

Planning for the Mall Museum educational programs and visitor services has begun. Dance, music, storytelling presentations, gallery demonstrations and interpretive programs, lectures, symposia, film screenings, and cultural festivals will be presented to an expected audience of over 2 million visitors each year.

One of the most exciting projects is a 20-minute film that will be shown several times each day in the 400-seat Mall Museum theater. This powerful and informative film will put forth the main messages of NMAI and will have a narrative style showing contemporary Native life and traditions. The film will have a life of at least 10 years and could be shown after-hours in the Museum and at other sites outside of NMAI. Necessary pre-production of the film will begin in FY 2001.

The Potomac Center will be the central gathering space in the Mall Museum. Projected to be the hub of the wheel of activities in the Museum, this dynamic space is being planned as an interactive program and exhibit space. NMAI will open the Mall Museum with a program/exhibit about Native boat building traditions, with a Northwest Coast canoe, a Plains skin-covered boat, and a South American reed boat under construction by makers. Visitors will be able to watch and talk with makers and climb into a finished birch-bark canoe. A video about contemporary canoe races in Native communities will be available at an interactive media station. Explanatory labels will inform visitors about the continuity of the traditions of Native boat building. The design of exhibit component modules will begin in FY 2001.

Community Services - In 1999, NMAI finalized several important projects that will serve as springboards to future activities. Two radio programs to accompany exhibits were released over AIROS (American Indian Radio on Satellite): *Memory and Imagination: The Legacy of Maidu Indian Artist Frank Day* and *Indian Humor*. The *Living Voices* radio series will be completed and begin airing in 2000. Approximately 45 Native profiles will be featured, including individuals from Alaska to New York to Mexico. The Museum also conducts a Native Artist Fellowship program in New York.

NMAI held the first Generation-to-Generation symposium, *American Indian Origins: Cultural, Historical, and Scientific Understandings* at the George Gustav Heye Center in New York. A second on contemporary Indian leadership is being planned for 2000, with a third on economics for 2001. Workshops for children in creative writing and photography were conducted in 1999. Planned 2000 workshops include Pomo basket weaving, technical museum assistance in Panama, repatriation in Oklahoma, and exhibit research in Washington DC. The bilingual publication, *Starting a Community Museum: Perspectives from Indigenous Peoples*, will be completed in 2000.

The Museum is also working on a new outreach project, the forthcoming *Indigenous Geography* website, which will be a collaboration with American Indian communities throughout the Western Hemisphere.

Eventually the site will become a cross-cultural dialogue that spans the disciplines of linguistics, literature, history, philosophy, and religion, usable by teachers, college and university faculty, students and the general public. Building on this, NMAI will work with other museums to offer a gateway to Native American collection resources in the context of community.

Publications - In 1999, the Museum published its first anthology of children's poetry: *When the Rain Sings: Poems by Young Native Americans*, in collaboration with Wordcraft Circle of Native Writers and Storytellers. Also scheduled for early 2000 is *The Changing Presentation of the American Indian: Museums and Native Cultures*.

NMAI also managed the production of a series of publications created in conjunction with the Gala fundraiser in December 1998 . Two significant pieces were *Native American Voices*, a photo journal, and the Honor-a-Treasure Portfolio. In 2000, in addition to support for the publications needs at the Heye Center and the CRC, NMAI will continue development of printed materials for the 2002 opening on the Mall.

Exhibitions - For the years 2000, 2001, and 2002, one of the Museum's highest priorities is the development, design and production of the opening series of permanent exhibitions for the Mall Museum. This work is being coordinated with the architectural design and construction of the building and is based on extensive work with Native communities. In addition, work will continue on the exhibit introduction presentation, open study collections, and smaller scale exhibitions throughout the building. Exhibition design will be completed in 2000 and production will begin in 2001 with installation occurring in late 2002.

The galleries at the Heye Center in New York continue to support changing exhibitions with current projects including *Spirit Capture*, which will open in 2002, and *Plains Shirts*, a collections-based show that will open in 2000.

National Campaign/External Affairs - Recent accomplishments include raising funds to support conservation during the move of the collection, initiating the first phase of the feasibility study for integrated marketing, and organizing the groundbreaking for the Mall Museum. Fund raising and external affairs goals for FY 2000 include raising additional funds for Mall construction and opening activities, formalizing a corporate membership program in New York, initiating an Inaugural Committee for the Mall Museum, and finalizing the study for integrated marketing.

EXPLANATION OF PROGRAM CHANGE - For FY 2001, the Smithsonian requests $8,695,000 and 35 positions for programmatic increases associated with the opening of the Mall Museum ($6,208,000 and 14 positions) and continuing the move of the collections from New York and operations at the Cultural Resources Center ($2,487,000 and 21 positions). The Institution requests that resources for this line item remain available until expended.

NMAI FY 2001 REQUESTED INCREASE	Positions	$000
Mall Museum:		
• Exhibits Development		$ 2,300
• Research/Acquisition		731
• Film Production		850
• Publications		74
• Potomac Center		150
• Technology		400
• Furniture/Equipment		479
Mall Museum Operations:		
• Education	1	92
• Exhibition	5	539
• Publications	1	157
• Resource Center	1	65
• Performance/Media	2	109
• Visitor Services	1	65
• Administration/Facility Management	3	197
Subtotal, Mall Museum	14	6,208
Collections Move to Cultural Resources Center		1,100
Cultural Resources Center Operations:		
• Research & Curatorial	4	262
• Archives Unit	2	186
• Conservation	1	65
• Photo Services	1	65
• Community Services	1	94
• Resource Center	2	145
• Information Resource Mgt. And Technology	2	236
• Facility Management	7	290
• Smithsonian Institution Libraries	1	44
Subtotal, Cultural Resources Center	21	2,487
Requested Increase	**35**	**$ 8,695**

The increases requested for FY 2001 are primarily directed at two Museum priorities: (1) Mall Museum opening needs, and (2) improved public

access to the collections. Both efforts will increase the accessibility of Native American artifacts and information about the cultures that the collection represents. The museum-going public, Indian communities and individuals throughout North and South America, and Native and non-native scholars will benefit from this increased access to the Museum's treasures.

Mall Museum Exhibitions and Museum Operations ($6,208,000 and 14 positions) - The Institution requests $2,300,000 for production and fabrication of exhibitions at the Mall Museum, and $731,000 to complete the curatorial research and development of the Mall exhibitions, supporting extensive coordination and liaison with thirty-five communities throughout the hemisphere as well as supporting the acquisition of contemporary objects and art for the Mall exhibitions. The production of an educational film to be shown daily at the Museum to inform the public about the diversity of the Native cultures of the Americas, and to underscore the vitality of contemporary Native American culture is estimated to cost $850,000. Also needed is $74,000 to provide contract editorial and photographic services for the two major books to commemorate the Museum's opening. The working titles of these books are *The Native Universe* and *The Soul of A New Museum*. A total of $150,000 is requested for the Potomac Center exhibit, including $60,000 for the design and fabrication of reusable, portable exhibit modules. This includes text panels, video programs, hands-on activities, and interactive computer programs. The opening exhibit/program is about Native boats and includes acquisition ($90,000) of such items as a Northwest Coast canoe, a birch bark canoe, and a Plains skin-covered boat. Furnishings and technology needs as the building is prepared for opening will require $879,000.

Six public programs positions are requested to prepare for operating a fully staffed museum in 2002. These positions include an education manager to plan and supervise the educational programs; an editor to support the increased demands for editorial assistance throughout the Museum's projects and education endeavors; a Resource Center program manager to plan and manage the Museum's public reference center; a media program manager to plan and manage film programs and audiovisual services for the theater and other program spaces; an administrative assistant to assist the program managers; and a visitor services manager to plan and manage ticketing and visitor crowd-control for galleries and all other public spaces.

The Institution also requests two administrative technicians and one facilities manager to prepare for the opening of the Museum and the increase in services required. It is essential to have a facilities manager on staff and available for constant consultation during the construction

process of a new building, particularly with regard to mechanical and other specialized systems.

Five positions are requested to develop and coordinate the design and production of the Mall Museum exhibits. A media producer will work with the exhibit project teams and designers to ensure efficient and unified solutions to all exhibit media needs; a writer/editor will provide editorial oversight to the exhibit authors; a graphic designer will provide the design services for the Mall exhibits, visitor guidance aids and special events and program graphic needs; a production supervisor will help solicit, select, and monitor the work of all exhibition production contracts; and an administrative assistant will provide support for the management of the exhibit labs, staff, and procurement.

Collections Move and Cultural Resources Center requirements ($2,487,000 and 21 positions) - The Institution requests $1,100,000 for additional contract services for relocating the collection, an increase critical to keeping on track with the move plan and to accommodate the Mall Museum opening.

The Institution also requests four curatorial positions to fulfill NMAI's plan for developing and sustaining exhibitions in New York, Washington, and the "fourth museum" in addition to funding to assist the staff in performing research on a virtually unknown and undocumented collection, greatly facilitating production of exhibitions and publications.

Five positions are requested to augment the archive, photo service and library units responsible for integration of the Huntington Library materials and cataloging, digitizing and researching the collection. The five positions are a library technician (for the Smithsonian Institution Libraries), two archivists, one photographer and a paper conservator position. These staff members are essential to acquiring film and video collections, documenting current events, and the preservation of photo, paper and fine arts objects.

A program specialist is requested to plan and implement the NMAI's Community Services training and consultation programs with particular focus on the NMAI's radio programming. This will allow for full implementation of a successful pilot program, which has broadened the scope of community services and strengthened the relationship between NMAI and its constituents.

Two additional staff would develop and maintain the content, computer programs and databases for interactive computers for the Mall

Museum Resource Center. This increase is key to utilizing technology to provide information and data to visitors to NMAI, either in person or via technology.

Two positions for technology would provide a programmer/analyst to develop data handling systems for curatorial information and a data technician to work with registration data management. Funds for systems software and contract services are needed to develop and expand a customized museum information system.

Three positions for facility management would meet the full operational needs of the CRC, a state-of-the art facility with a wide range of specialized environmental needs. Finally, four positions for the Institution's Office of Physical Plant would provide maintenance services for building systems and structures, grounds maintenance, and transportation services for CRC.

The increases requested will move NMAI much closer to its goal of providing first-rate care and wide public access for the extensive and significant collections entrusted to it in the legislation of 1989. By continuing the relocation of the collection from New York and providing the needed program and support staff at the CRC, the long-term preservation of the artifact, archive, and library collections will be assured. Applying current technology to the recording of collections data during this relocation will improve management of the collections, expand security and inventory efforts and make broadly accessible both text and image information for multiple users in on-site and distant locations. Community services staff will help link the CRC's resources to specific users and encourage collaborative projects. Finally, the funds will help begin the crucial work of producing the inaugural exhibitions and related educational publications and materials that will make NMAI's collections directly accessible to millions of visitors to the new Mall Museum.

NONAPPROPRIATED RESOURCES - General Trust funds provide support for salaries and benefits of personnel, a portion of the National Campaign costs, and specialized program activities. NMAI continued its collaboration. with the Neues Publishing company, producing both a wall calendar and an engagement calendar for 2000. A 2001 wall calendar is being finalized. Donor/Sponsor Designated funds provide support for costs related to specific programs and projects, including educational programs, exhibits, and outreach.

NATIONAL MUSEUM OF NATURAL HISTORY

	APPLICATION OF OPERATING RESOURCES							
	FEDERAL APPROPRIATIONS		GENERAL TRUST		DONOR/SPONSOR DESIGNATED		GOV'T GRANTS & CONTRACTS	
	FTE	$000	FTE	$000	FTE	$000	FTE	$000
FY 1999 ACTUAL	582	40,833	17	2,569	35	10,330	12	3,276
FY 2000 ESTIMATE	582	45,218	14	3,275	30	18,329	10	2,560
FY 2001 ESTIMATE	582	43,603	15	3,022	27	5,294	11	1,189

ABSTRACT - The National Museum of Natural History (NMNH) enhances the understanding of the natural world and humanity's place in it. The Museum's researchers study natural and cultural diversity by collecting and identifying specimens of nature and human invention, establishing relationships among them, and explaining the underlying processes that generate, shape, and sustain their diversity. The Museum interprets this scientific understanding to a national audience through research reports, exhibitions, and education programs. Stewardship of the national collections underpins Museum activities and ensures preservation and global access to these world resources in perpetuity. The close linkage between research, outreach, and collections stewardship is a hallmark of the Museum, lending perspective and authenticity to its research and authority to its outreach.

For FY 2001, the Smithsonian is not seeking additional funding for programmatic increases for the National Museum of Natural History. FY 2001 Non-recurring Costs include $650,000 for the East Court infill project and $2,500,000 for the Arctic Studies Center including assistance to other museums. The Institution requires $1,535,000 for Necessary Pay for existing staff in this line item.

PROGRAM - The National Museum of Natural History (NMNH) is one of the leading international centers for research on natural history and anthropology. More than 100 Smithsonian and 50 affiliated-agency scientists working worldwide in the field conduct research using the Museum's unparalleled collections and laboratory facilities. Public exhibits at NMNH attract about six million visits annually. Outreach programs, including traveling exhibits, interactive electronic classrooms and field trips, and informational websites serve millions more, nationally and internationally. The Museum is committed to maintaining its intellectual and

institutional leadership in its scientific disciplines, to conserving and expanding access to its irreplaceable collections, to training the next generation of scientists and technicians, to developing and implementing innovative and virtual educational materials and methodologies to expand and enhance public use of its resources, and to continuing its recognition as America's authoritative source of knowledge of humanity's place in the natural world.

Research - In order to provide context for issues such as global change and biological diversity, the Museum's research emphasizes both historical and contemporary approaches to critical research questions. During FY 1999 Museum scientists' contributions in the area of research were many and varied, from the discovery of athene blewitti, the Indian forest owlet previously believed to be extinct, to providing a scientific foundation for the discussion of the first Americans in both *Discover* magazine and *Newsweek*.

Museum researchers annually produce over 600 papers per year; two paleobiologists published an influential report in *Science*, providing the first demonstration in the fossil record of a long-term insect herbivore response to a major shift in paleoclimate. In addition to articles in peer-reviewed journals, Museum scientists also produced articles for the general public. Two stories penned by NMNH scientists appeared in the *Washington Post*'s educational supplement *Horizon* section: one on the discovery of a coelacanth, a rare and ancient fish; and the other an extensive feature article on human evolution.

NMNH botanists participated heavily in producing the *International Union for Conservation of Nature and Natural Resources Red List of Threatened Plants*, the result of a massive 20-year effort to compile worldwide data on plant diversity. The Red List, which lists all of the endangered, extinct and/or vulnerable plants in the world, is the product of a global partnership that combined the research and resources of the NMNH with those of other national and international organizations in an unprecedented effort to document the status of 270,000 known plant species. This information is critical for the ultimate conservation of rare and endangered plants both in the United States and abroad.

A Museum researcher received the National Science Foundation's prestigious Partnership for Enhancing Expertise in Taxonomy (PEET) grant.

Museum researchers are increasingly using new technologies to explore the past. Museum paleobiologists are working with private sector

partners to produce the world's first 3D-digital dinosaur, a model of NMNH's *Triceratops*, that can be examined and manipulated by computer.

Collections Management - In FY 1999 approximately 326,000 specimens were added to the Museum's collections. Among the highlights are a paleoarctic beetle collection imported from Belarus and a large collection of moths and butterflies from the British Museum, as well as a significant group of textiles collected in Mexico and several important meteorites with excellent documentation of their arrivals on earth.

For the first time, all collecting units are using the transaction management section of the Museum's computerized Collections and Research Information System (CRIS), which facilitates oversight of the collections management practices of the Museum. The central collections staff can now monitor the huge number of incoming and outgoing loans and acquisitions. Additional oversight has been made possible through implementation of on-going cyclical inventories that will help the collections staff adequately monitor the day-to-day care and condition of the collections, as well as confirm location and accountability.

The Museum nearly completed its survey of needs and requirements for a computerized multimedia catalogue, which is the second major component of CRIS. This component is expected to be acquired in FY 2000 for implementation throughout the Museum.

A Collections Health Unit, to begin in FY 2000, was designed to allow the staff to begin tracking the relative health of the collections in storage by examining physical condition, non-destructive association of data, and a set of fundamental questions designed to give the Museum a snapshot of the collections' health.

Public Programs – The Museum is continuing its renovation and upgrade plans for exhibitions. In FY 1999 NMNH opened to the public several research exhibit cases, and opened two major permanent installations, the Kenneth E. Behring Family Rotunda with its new elephant diorama, and the *African Voices* exhibition. In FY 2000, the Museum will open the highly acclaimed *Vikings: The North Atlantic Saga* which commemorates the millennial anniversary of the Vikings' arrival in North America. In FY 2001, the Museum will continue the development and design of the new Mammals complex, scheduled to open in 2003. NMNH also plans to finish design, script, and installation of a complete upgrade of the Human Origins exhibition.

Building on the successful traveling exhibition on agricultural changes in North America, *Listening to the Prairie*, NMNH will continue to develop the *Forces of Change* project and its permanent exhibit scheduled to open in the fall of 2001. Through publications, computer products, public programs, and the 6,500-square-foot-exhibition, the project examines the science and dynamics of global change.

Again in 2001, the Museum will present several exciting temporary exhibitions. For the very first time the impressive colored diamond, the Dresden Green, will come to America and be displayed with the Hope Diamond. At the same time the Museum will display the work of the famous Italian silversmith Buccellati. Later in the year, the Museum will be home to the successful British exhibition, *Voyages of Discovery*.

Electronic outreach continues to be a high priority for the Museum. Natural Partners is currently planning electronic fieldtrips and remote sensing expeditions for FY 2001. NMNH is actively collaborating with five new partners to deliver electronically the Smithsonian's natural history collections and science to various locations across the nation.

Major Facility Expansion and Renovation - While the East Court renovation and expansion project has been completed, related moves of staff and collections will continue through FY 2001. Included in this work is the relocation of millions of delicate insect collections. These moves will require the continued use of supplemental contract labor, supplies, and equipment. These relocations are critical to the continued progress of the Major Capital Renewal Project. The Major Capital Renewal Project, continuing through the next decade, will provide the Natural History Building with a new heating, ventilating, and air conditioning system.

In the West Court, the Discovery Center opened to the public May 12, 1999. The museum shops, Atrium Café, and the Johnson IMAX® Theater are now in operation.

NONAPPROPRIATED RESOURCES - General Trust funds provide support for salaries and benefits, general program costs, and fund raising. Donor/Sponsor Designated funds provide support for cost related to specific program and projects, such as *African Voices*, and the restoration of the Rotunda. Government Grants and Contracts provide support for research and exhibitions.

NATIONAL PORTRAIT GALLERY

	APPLICATION OF OPERATING RESOURCES							
	FEDERAL APPROPRIATIONS		GENERAL TRUST		DONOR/SPONSOR DESIGNATED		GOV'T GRANTS & CONTRACTS	
	FTE	$000	FTE	$000	FTE	$000	FTE	$000
FY 1999 ACTUAL	85	5,403	0	340	1	329	0	0
FY 2000 ESTIMATE	85	5,626	1	375	1	210	0	0
FY 2001 ESTIMATE	85	5,835	0	145	1	405	0	0

ABSTRACT - The National Portrait Gallery (NPG) is dedicated to the exhibition and study of portraits of people who have made significant contributions to American history and culture and to the study of the artists who created such portraiture. NPG collects, documents and preserves portraits in all media as both historical and artistic artifacts.

For FY 2001, the Smithsonian is not seeking additional funding for programmatic increases for the National Portrait Gallery. The Institution requires $209,000 for Necessary Pay for existing staff funded in this line item.

PROGRAM - The Gallery explores the heritage and accomplishments of the American people by collecting, documenting and preserving, studying, and exhibiting portraits in all media as both historical and artistic documents.

Research - The Center for Electronic Research and Outreach Services continues to bring NPG collections, programs, and exhibitions to researchers and the public via the World Wide Web. Ten exhibitions and a feature on The Peale Papers were added this year. Overall visitor hits to NPG's award-winning website average approximately one million per month.

The Peale Papers staff submitted the final page proofs and index to Yale University Press for volume 5 of the *Selected Papers of Charles Willson Peale and His Family: The Autobiography of Charles Willson Peale.* Publication is scheduled for spring 2000. Plans for volumes 6 and 7, to comprise selected letters and documents from the children of James and Charles Willson Peale, have been approved by the Gallery's Advisory Board.

Collections Management - More than 4000 digital images now accompany records on the Gallery's newly implemented Collections Information System with various scanning projects in progress. American portraits in major European collections have been surveyed and are included in the new database. Work is underway to increase public access by creating a Web interface with the collections database.

Collection Acquisition - During FY 1999, NPG acquired approximately 224 objects. Among the most important were portraits of Thomas Jefferson by Mather Brown; General George S. Patton Jr. by Boleslaw Czedekowski; Henry James by Ellen Emmet Rand; Richard Watson Gilder by Cecilia Beaux; Washington Irving by Charles Loring Elliott; John F. Kennedy by Elaine de Kooning; a drawing of Jamie Wyeth by Andy Warhol; photographs of Mohammed Ali, Malcolm X, and Stokely Carmichael by Gordon Parks; and Ernest Hemingway by Yusuf Karsh.

Exhibitions - An important exhibition, *Franklin & His Friends: Portraying the Man of Science in Eighteenth-Century America*, was organized in conjunction with the National Museum of American History. Other major exhibitions included *Theodore Roosevelt: Icon of the American Century*; *Philippe Halsman: A Retrospective*; *Paul Robeson: Artist and Citizen*; *George and Martha Washington: Portraits from the Presidential Years*; *Hans Namuth: Portraits*; *Picturing Hemingway: A Writer in His Time*; *Edward Sorel: Unauthorized Portraits*; *A Durable Memento: Portraits by Augustus Washington, African American Daguerreotypist*; and *Tête à Tête: Portraits by Henri Cartier-Bresson*.

In January 2000, the Gallery closed its doors to the public for approximately three years while the Old Patent Office Building undergoes major renovation. Eight exhibitions drawn from more than 18,000 images in the Portrait Gallery's collection will travel throughout the United States, Japan, and Europe while the Gallery is closed. The exhibitions include a major group of portraits of U.S. presidents based on the Gallery's Hall of Presidents; 75 paintings spanning more than two centuries, including works by the most important portrait artists the Nation has produced; a wide-ranging group of 60 photographs of notable American women of the 20th century portrayed by the preeminent photographers of our time; and a collection of extraordinary portrait drawings beginning with a luminous watercolor self-portrait by Mary Cassatt.

Publications - All of the books published by the Gallery in FY 1999 were produced to accompany the major exhibitions mentioned above. *Picturing Hemingway: A Writer in His Time,* published in association with

Yale University Press, was the Book-of-the-Month Club's main selection for June.

Education - A major grant has been received to develop, implement, and evaluate an expanded menu of outreach programs for the Washington DC metropolitan area and national audiences. A series of 48 living history performances drew a combined audience of 3,230 and Hispanic Heritage Month programs featured a series of panel discussions and U.S.-made Latino films, shorts, and documentaries. Close to 3,000 visitors enjoyed the varied sounds of July's Courtyard Concert series, *The Age of Elvis: The Roots of Rock & Roll*.

Development - A new Director's Circle has been launched, and an NPG Council is being planned to encourage foundations, corporations, and individuals to support programs. The Director's Circle is a new program designed to encourage participation and financial support from a broad range of contributors including civic, cultural, and commercial leaders in the greater Washington DC community and across the Nation.

NONAPPROPRIATED RESOURCES - General Trust funds provide support to help defray costs of publications, public lectures, symposia, special events for exhibition openings, loan exhibition development, fund raising, management and research. Donor/Sponsor Designated funds provide support for costs related to specific programs and projects including support of NPG's Director's Circle. Donors included The Morris and Gwendolyn Cafritz Foundation, Eastman Kodak Charitable Trust, and Thomasville Furniture Industries, Inc.

NATIONAL ZOOLOGICAL PARK

	APPLICATION OF OPERATING RESOURCES							
	FEDERAL APPROPRIATIONS		GENERAL TRUST		DONOR/SPONSOR DESIGNATED		GOV'T GRANTS & CONTRACTS	
	FTE	$000	FTE	$000	FTE	$000	FTE	$000
FY 1999 ACTUAL	317	19,695	5	1,445	2	1,469	11	851
FY 2000 ESTIMATE	317	20,453	6	1,903	2	1,478	11	875
FY 2001 ESTIMATE	317	21,175	6	1,925	2	1,512	11	900

ABSTRACT - The National Zoological Park's (NZP) mission is the advancement of science, biological conservation, education, and recreation. NZP serves the public and specialized audiences by promoting conservation of life on Earth through informal and formal education, research, and animal health programs. More than a zoological park concerned only with living animals, NZP is a biological park whose scope extends to the whole living world.

For FY 2001, the Smithsonian is not seeking additional funding for programmatic increases for the National Zoological Park. The Institution requires $722,000 for Necessary Pay for existing staff funded in this line item.

PROGRAM - NZP's educational efforts center on biological literacy, with special emphases on evolution, complex adaptive interactions, origins and importance of biodiversity, global change, and the impact of humans on the world. NZP exhibits a wide range of living plants and animals on its 167-acre facility in Rock Creek Park in Washington DC. It also maintains the Conservation and Research Center as a major facility for endangered species propagation, conservation, training, and research located on 3,150 acres near Front Royal, Virginia. A highly skilled staff develops, manages and sustains NZP's unique living exhibits and diverse research and education programs, as well as information systems and technology which are now an integral part of all NZP functions. NZP also participates in the International Environmental Science Program, which supports long-term studies of the endangered Golden Lion Tamarin.

Research - Zoo pathologists discovered that the same virus that killed the elephant calf Kumari in 1995 was also responsible for 15 other elephant deaths in European and North American zoos in the past decade. The virus is a new type of herpes virus carried without illness by African

elephants but fatal to Asian elephants. The virus was identified by DNA amplification from preserved tissues. This led to use of an anti-herpes virus drug to successfully treat three other sick elephants. These findings, published in *Science*, are a breakthrough in herpes virus biology that improves understanding of these pathogens in humans and other animals.

NZP scientists are integrating conservation of migratory birds with tropical agro-systems, particularly coffee and cacao (chocolate). Field research in Peru, Panama, and Mexico refine our understanding of how to grow these crops profitably under a canopy of native trees that support wintering migratory songbirds. The findings help to establish international guidelines for certifying shade-grown coffee in a rapidly expanding marketplace. In some places, such as the Peruvian Andes, this work allows farmers to support their families without growing illegal drugs for export.

Living Exhibits - The new *American Prairie* exhibit opened in 1999, featuring bison, prairie dogs, native grasses, and an interpretive program on grassland biology and the culture and challenges of human life on the prairie. A new zebra exhibit opened near the Cheetah Conservation Station to expand the African grasslands presentation. A farming and domestication exhibit is in concept development. It will explore the impact of the discovery of agriculture on human history, and production and processing of the many agricultural products that enrich our daily life. The *Great Cats* exhibit, opened in 1998, was enlivened by the birth of three endangered Sumatran tiger cubs. In a BioPark tradition, NZP is planning development of a world heritage garden, building upon, and partially replacing existing American Indian and African American Heritage Gardens with a complex of agricultural and medicinal plants from around the world. The new water exhibit, scheduled for final design in 2000, will explore current and historical human impact on the world's fresh water and create an interactive parent/child watersheds exhibit.

Conservation - NZP staff initiated a detailed three-year biomedical survey of captive giant pandas in an effort to improve breeding in Chinese zoos in cooperation with the San Diego and St. Louis Zoos. Zoo staff provided technical training to more than 35 veterinarians from Chinese zoos and panda reserves. Staff also participated in a special workshop at the Wolong Nature Reserve in China, the largest giant panda reserve in the world, to develop a long-term strategy for monitoring and conserving giant panda populations in the wild.

Zoo staff initiated the mapping of one of the last intact grassland ecosystems in the world—the steppes of eastern Mongolia—using a combination of ground surveys, satellite imagery, and geographic information system technologies. Because many of the species native to

this region are seasonally migratory, accurate mapping is essential for their long-term conservation.

Education - In 1999, NZP developed its educational mission and vision for the next five years. Emphasis is on the visitor experience and teacher training at Rock Creek Park and outreach at Front Royal, Virginia. NZP launched a coordinated program to upgrade its public exhibit programs through training, additional staff support, and equipment. NZP's goal is to ensure that by 2004 every visitor has a direct opportunity to interact with NZP biological staff, scientists, and volunteers. Exhibits continue to highlight Smithsonian scientists throughout NZP. A new series of graphics gives visitors insights into artistic, scientific, and historical links between living plants and animals, and other Smithsonian exhibits. NZP continues to expand Latino initiative programs through a larger Hispanic Festival, setting attendance records in 1999, and collaboration between the Latino Community Center in Washington DC and the Community Science Project of California. In 2000, NZP expects to help create and advise a Community Science Center in Washington DC. This is all done in the context of existing programs such as public lectures, special events such as the African American Celebration, research lectures, public demonstrations, film dissemination, publications, and field trip guides.

NZP also expanded its professional training and education programs in conservation. Over 200 individuals from 40 countries participated in specialized training courses in the U.S. and abroad, and more than 50 school teachers received training in establishing hands-on biodiversity monitoring programs for secondary students. Additionally, NZP launched several elementary education programs for students in Northern Virginia, and a community lecture series dealing with key issues in conservation and science.

Facilities - NZP maintains over 700,000 square feet of space at Rock Creek and over 300,000 square feet of space at Front Royal. Facilities and exhibits include indoor and outdoor space and specialized environments that receive heavy use and wear. A computer-aided facilities management (CAFM) system is being implemented to improve efficiency, administration, and tracking of these activities and costs. This system is consistent with other Smithsonian CAFM systems, and is mission-critical to ensure safe facilities for the collection, visitors, and staff.

Information Technology - Use of latest information technology (IT) is critical to all parts of NZP mission. An ever-growing development of the NZP website features live coverage of unique zoo events like the birth of the Sumatran tiger cubs. NZP uses IT for animal collection inventories and

monitoring of animal diet and medical histories. Building support systems and all administrative functions are dependent on IT, and during 1999 NZP has reduced its reliance on paper and increased efficiency through online systems support.

NONAPPROPRIATED RESOURCES - General Trust funds support salaries and benefits of personnel, general support, fund raising, outreach, and acquisitions. Donor/Sponsor Designated funds support costs related to specific programs and projects, such as conservation, research, and training. Government grants and contracts support research.

SMITHSONIAN ASTROPHYSICAL OBSERVATORY

	APPLICATION OF OPERATING RESOURCES							
	FEDERAL APPROPRIATIONS		GENERAL TRUST		DONOR/SPONSOR DESIGNATED		GOV'T GRANTS & CONTRACTS	
	FTE	$000	FTE	$000	FTE	$000	FTE	$000
FY 1999 ACTUAL	141	18,753	98	11,422	14	2,804	285	53,640
FY 2000 ESTIMATE	141	19,885	98	13,867	14	2,769	286	56,119
FY 2001 ESTIMATE	141	20,578	98	13,967	14	3,263	285	56,000

ABSTRACT - The Smithsonian Astrophysical Observatory (SAO) conducts research to increase understanding of the origin and nature of the universe and to communicate this information through publications, teaching, and public presentations. SAO studies diverse systems, including the large-scale structure of the universe, clusters of galaxies, quasars, the sun, and planets. SAO also conducts research in laboratory astrophysics, atmospheric physics, geophysics, medical physics, and pre-college science education. SAO research has a major impact in the worldwide scientific community and has helped the United States maintain worldwide leadership in science.

For FY 2001, the Smithsonian is not seeking additional funding for programmatic increases for the Smithsonian Astrophysical Observatory. An increase of $166,000 justified in the Mandatory Increases section of this budget will support increased rental cost for SAO facilities in Cambridge, Massachusetts. The Institution requires $527,000 for Necessary Pay for existing staff funded in this line item.

PROGRAM - SAO is a member of the Center for Astrophysics, headquartered in Cambridge, Massachusetts. In collaboration with the Harvard College Observatory, SAO pursues a broad program of research organized by the following disciplines: atomic, molecular and medical physics; high-energy astrophysics; optical and infrared astronomy; planetary sciences; radio and geoastronomy; solar and stellar physics; theoretical astrophysics; and science education.

SAO's observation facilities include the Fred Lawrence Whipple Observatory in Arizona, the Oak Ridge Observatory in Massachusetts, the Submillimeter Array under construction in Hawaii, and a millimeter-wave

radio telescope at Cambridge, as well as instruments occasionally launched aboard balloons, rockets, and spacecraft.

Research - The Chandra X-ray Observatory, which carries a high-resolution camera built by SAO, was launched aboard the Space Shuttle Columbia July 23,1999, on a five-year mission that is expected to produce unprecedented images of a host of objects, ranging from comets in our own solar system to quasars at the very edge of the observable universe. Chandra's scientific program and all observations are being coordinated from a control center in Cambridge, MA, operated by SAO for the National Aeronautics and Space Administration (NASA). In addition to controlling flight operations and developing the spacecraft's primary imaging instrument, SAO made critical contributions to the design, fabrication, and testing of the special mirrors that form the heart of the Chandra telescope. SAO is also the site of the Chandra X-ray Science Center, which receives, analyzes, and archives data from the telescope and makes them available to the world's astronomical community.

On March 25,1999, staff from the Smithsonian's Whipple Observatory and the University of Arizona's Mirror Laboratory lifted the 10-ton, 6.5-meter-diameter replacement mirror for the Multiple Mirror Telescope (MMT) by crane, over the MMT building, and into the mirror's awaiting support cell. With the successful insertion of the new mirror, the conversion of the MMT from an instrument with six separate mirrors to one with a single monolithic piece of glass met a major milestone in a conversion that will more than double its light-gathering capability and increase its field of view some 400 times. Testing of the converted telescope continued into the fall of 1999, with first light achieved before the end of the year, and an official dedication planned for spring of 2000.

SAO astronomers and their colleagues used the National Radio Astronomy Observatory's continent-spanning Very Long Baseline Array (VLBA) to make the most precise measurement ever to a faraway galaxy, finding a distance of 23.5 million light-years to the galaxy NGC 4258 in Ursa Major. The measurement is thought to be accurate to within 4 percent and calls into question the stated accuracy of other size and age estimates of the universe. Using the VLBA radio telescope system, SAO astronomers measured much more precisely than previously the motion of the sun in the Milky Way and found it to be orbiting about our galaxy at a speed of nearly 500 thousand miles per hour.

Launched in December 1998, the SAO-designed Submillimeter Wave Astronomy Satellite (SWAS) has provided evidence that large amounts of water seem to pervade the interstellar medium, with especially copious

amounts found in the huge molecular clouds thought to be the incubators of newborn stars. By contrast, SWAS has found no trace of molecular oxygen in those same interstellar clouds.

The development of low-field magnetic resonance imaging (MRI) by SAO scientists was cited by the American Institute of Physics as one of the outstanding developments in physics last year. A typical MRI device uses a huge magnet to polarize hydrogen nuclei inside water molecules in human body parts, and the spinning molecules produce radio signals that can image tumors. The SAO innovation, developed in cooperation with a Boston-area hospital, uses lasers to increase the nuclear spin-polarization of certain inert gases, thus enhancing MRI's imaging potential in body cavities, such as the lungs and sinuses, where MRI had previously been ineffective. More significantly, perhaps, the process uses low-field magnets, which promises the development of much simpler, less intimidating MRI units in hospital settings, as well as low-cost, portable instruments for use in remote, cramped environments, such as space vehicles.

Education - In FY 1999, SAO continued work on a discovery-based elementary school curriculum using astronomy as a unifying theme, as well as on middle school curricula relating to engineering designs and communications technology. The first curriculum is being published and the other two are expected to be published for use in schools. The Education Forum at SAO is one of four major centers for space science education established this past year by NASA, to bring stories and concepts relating to the structure and evolution of the universe to the widest possible audience. SAO's Summer Intern Program brought a dozen college undergraduates to Cambridge to work with SAO scientists on a variety of research projects.

Outreach - In addition to its formal education efforts, SAO offers a broad range of informal outreach programs for students, amateur astronomers, and the general public. In Cambridge, MA, these programs include free monthly Observatory Nights featuring a nontechnical lecture and telescopic observing, with similar programs offered twice a year specifically for children aged six through twelve. A weekly recorded telephone message provides information on backyard astronomy, and a broad and diverse selection of general astronomical information is available on SAO's website. In Arizona, the Visitors Center at SAO's Fred Lawrence Whipple Observatory in Amado features displays and exhibits on astronomy and astrophysics, natural science, and cultural history. Special Star Parties, featuring lectures and telescopic viewing, are held quarterly at the Center, public lecture series are sponsored in local communities, and reserved-seat bus tours are conducted three times weekly from early spring to late fall. A

special outreach program for the Hispanic community offers bilingual lectures, demonstrations, and tours, as well as teachers' workshops. Similar community programs are now being planned for Hawaii to complement the astronomical research of the Submillimeter Array.

NONAPPROPRIATED RESOURCES - General Trust funds provide support for salaries and benefits of personnel and general operations. In addition, these funds provide support for research, fellowships, and business expenses. Donor/Sponsor Designated funds provide support for costs related to specific programs and projects. Government grants and contracts provide support for major research in SAO's areas of expertise and experience, which is often carried out in cooperation with both governmental and academic institutions in the United States and abroad.

SMITHSONIAN CENTER FOR MATERIALS RESEARCH AND EDUCATION

	APPLICATION OF OPERATING RESOURCES							
	FEDERAL APPROPRIATIONS		GENERAL TRUST		DONOR/SPONSOR DESIGNATED		GOV'T GRANTS & CONTRACTS	
	FTE	$000	FTE	$000	FTE	$000	FTE	$000
FY 1999 ACTUAL	36	2,974	0	-18	0	4	0	-1
FY 2000 ESTIMATE	36	3,165	0	120	0	0	0	0
FY 2001 ESTIMATE	36	3,265	0	35	0	18	0	0

ABSTRACT - The Smithsonian Center for Materials Research and Education (SCMRE), located at the Museum Support Center in Suitland, Maryland, is the Smithsonian's specialized research facility for the conservation and technical study of museum objects. SCMRE staff examine the conservation-related properties of materials, extract contextual information from their technical record, and improve conservation treatment technology. Experience with a wide range of materials and expertise in analytical and technological studies enables SCMRE to engage successfully in collaborative research with anthropologists and art historians. SCMRE also conducts a conservation training program that includes basic and advanced conservation theory and technique, supports and organizes workshops and seminars, and disseminates the latest knowledge in the field of conservation and cultural materials research to museums and research professionals as well as more general audiences throughout the United States and the World.

For FY 2001, the Smithsonian is not seeking additional funding for programmatic increases for the Smithsonian Center for Materials Research and Education. The Institution requires $100,000 for Necessary Pay for existing staff funded in this line-item.

PROGRAM - SCMRE's program areas include research and development, education and training, and support and collaboration.

Research and Development - A newly initiated study based on SCMRE's expertise in provenance studies of archaeological ceramics through elemental composition characterization is focused on the history of the missions in California. By studying ceramics excavated at these missions, and attributing these either to local production or to exchange

and import, researchers may shed additional light on the relationships between the missions and the Spanish settlements in California and Mexico, as well as the missions' move to self-sustainability. The results of this study, which is part of a program of joint activities between SCMRE and the Santa Clara University in Santa Clara, California, will be the basis for community-based outreach projects for specific target audiences, including exhibits at the missions and California high school curriculum packages.

SCMRE collaborated with the Carnegie Institution of Washington to establish a shared facility for light-element-isotope-ratio spectrometry. This equipment, which came online in the summer of 1999, allows a much higher sample processing than was possible before, and thus significantly enhances the research capabilities of SCMRE's biogeochemistry specialists in biomolecular studies of archaeological, paleological and biological collection materials. In addition to research already in progress on subjects such as prehistoric dietary habits and the utility of natural history collections as base line materials for ecological stress studies, a new pilot study showed great promise of this technique for provenance attribution of some organic archaeological and historic materials.

Education and Training - Fundamental to educational programming at SCMRE is pursuit of dissemination of knowledge to new and wider audiences, extending beyond our traditional constituency of museum conservation professionals, without abandoning them. During the past year, SCMRE education programming has continued development in several areas of major emphasis.

One of these is the program of education, outreach, and technical studies on characterization and preservation of Hispano-American polychrome wood veneration art (Santos, or Imagenes). Building on the wide appeal of the successful workshops on the preservation of Santos at SCMRE and in Puerto Rico in May 1998, a small exhibition on the materials and techniques of these objects was organized. Hosted by the de Saisset Museum at Santa Clara University in the summer of 1999, the three-month exhibition centered around four objects from the de Saisset and National Museum of American History collections, and dealt with issues surrounding artist materials and techniques, scientific methodologies involved in technical studies of these objects, and the significance of the findings of such studies for a better understanding and appreciation of the living cultural tradition that these objects represent. Some other California missions have expressed interest in hosting this exhibition, and plans are underway for the design of a larger, enhanced version.

Based on the expertise gained over the duration of the Research Collections, Libraries and Archives (RELACT) training program in archives preservation, SCMRE, in collaboration with the Rome-based International Centre for the Study of the Preservation and Restoration of Cultural Property, organized and hosted a six-week international course on the preservation of paper-based archival materials in July and August 1999. Attended by an audience of archivists, historians, curators, and conservators from all continents, this course was taught with a newly designed, SCMRE-created Web-based curriculum. Participants in this course are also now able to access the curriculum materials through the Web and use these in teaching professionals in their own countries and institutions.

In addition to these initiatives, SCMRE continued in FY 1999 with more traditional offerings through the Furniture Conservation Training Program, the RELACT program in archives preservation, and the Archaeological Conservation Program. Additional courses, including several in the now fully operational program in optical microscopy as well as internships and fellowships in material characterization and preservation studies, were offered, and the expansion of electronic media outreach continued.

Support and Collaboration - SCMRE's technical support staff continued to provide analytical and technical assistance to conservation and curatorial staff in various Smithsonian museums, as well as to ongoing research and educational efforts at SCMRE. During FY 1998, the staff performed almost 2,400 analyses of which 33 percent were for other Smithsonian units. They often were consulted and offered advice on diverse technical and analytical matters, including x-ray radiography, optical and electron microscopy, and organic materials characterization. Technical support staff also operated, maintained, and upgraded as necessary SCMRE's extensive research and computing equipment. Staff provided answers to over 1,100 requests for information from the general public and museum professionals, both nationally and internationally. The staff also assisted with the production and distribution of SCMRE technical guidelines and other publications for museum professionals and, in collaboration with SCMRE's education coordinator, maintained and updated SCMRE's website.

NONAPPROPRIATED RESOURCES - General Trust funds provide support for research and education activities. Donor/Sponsor Designated funds provide support for costs related to specific programs and projects. Government Grants and Contracts provide support for special projects that use SCMRE's expertise and experience.

SMITHSONIAN ENVIRONMENTAL RESEARCH CENTER

	APPLICATION OF OPERATING RESOURCES							
	FEDERAL APPROPRIATIONS		GENERAL TRUST		DONOR/SPONSOR DESIGNATED		GOV'T GRANTS & CONTRACTS	
	FTE	$000	FTE	$000	FTE	$000	FTE	$000
FY 1999 ACTUAL	45	3,147	1	258	3	254	28	1,968
FY 2000 ESTIMATE	45	3,206	1	248	0	193	31	1,100
FY 2001 ESTIMATE	45	3,310	1	235	0	150	31	1,200

ABSTRACT - The Smithsonian Environmental Research Center (SERC) advances stewardship of the biosphere through interdisciplinary research and education. SERC scientists study a variety of interconnected ecosystems starting from its base on the shore of the Chesapeake Bay and radiating out to comparative landscapes throughout the world. Research findings are communicated to diverse audiences through public programs and professional training.

For FY 2001, the Smithsonian is not seeking additional funding for programmatic increases for the Smithsonian Environmental Research Center. The Institution requires $104,000 for Necessary Pay for existing staff funded in this line item.

PROGRAM - The Smithsonian Environmental Research Center is dedicated to increasing knowledge of the biological and physical processes that sustain life on Earth. SERC's interdisciplinary research includes long-term studies to examine the ecological questions about landscapes of linked ecosystems, especially those affected by human activities. Located on the shore of the Chesapeake Bay, SERC uses the geographic features of the nation's largest estuary to investigate interconnections among aquatic, terrestrial and atmospheric components of complex landscapes. These studies are then compared on regional, continental and global scales. For improved stewardship of the biosphere, SERC's research provides data, publications and expert consultation in support of conservation, environmental policy and management of natural resources. Connected to an international network of collaborators, SERC trains future generations of scientists to address ecological questions of the Nation and the globe. SERC's education programs use exposure to a natural environment to demonstrate to the public both the active process of research and also the value of scientific approaches to environmental issues.

Research - SERC's research on the effects of increased carbon dioxide on plants shows how global change in the atmosphere is affecting marshes, coastal scrub, and forest communities. The Department of Energy uses SERC research in large-scale biosphere models of complex interactions of nutrients and water with altered plant production. SERC scientists also study the effects of increased ultraviolet rays in sunlight at a network of sites from Antarctica to Hawaii to Maryland.

Research on landscape ecology at SERC determines the effects of agriculture, forests, and topography on the transfer and transformation of nutrients flowing into the Chesapeake Bay and other estuaries that suffer from too much nitrogen and phosphorus. For example, SERC scientists completed a study of constructed wetlands, which reduce runoff from farmland and help restore water quality.

SERC is a national center for research on introduced marine species that are invading coastal ecosystems at unprecedented rates throughout the world. One of the main causes of these biological invasions is plankton transferred in the ballast water of ships. In FY 1999, SERC implemented the National Ballast Water Information Clearinghouse (as provided for in the National Invasive Species Act of 1996), which gathers data on all commercial ships from foreign ports releasing ballast water to all U.S. ports. SERC is also developing a database of biological invasions of all major coastal regions in the United States.

During FY 1999, SERC's research program on population dynamics and community ecology expanded its research on mangrove forests, a crucial ecosystem of tropical coastlines. SERC's mangrove research shows that these plants restrict nutrient and sediment flow from the land into fragile nearshore habitats, including sea grasses and coral reefs.

Education - SERC expanded its public offerings in FY 1999 to include presentations to regional school groups, workshops for teachers, public lectures for interested citizens, and innovative educational offerings to diverse constituencies, including disabled citizens. Over 10,000 individuals participated in programs at SERC in FY 1999, and thousands more participated through website activities. Students in grades K-12 participated in a variety of aquatic and terrestrial activities involving inquiry, exploration, data collection, and student cooperation. Undergraduate and graduate students received professional training in the Work/Learn program at SERC. Educators and education administrators from the Washington metropolitan area attended 12 workshops, discussion groups, and forums on SERC's research findings related to ecological issues.

SERC educators continued to offer field and research opportunities for teachers and students from Gallaudet University. In its professional training program, SERC trained 26 interns, 6 graduate student fellows, 8 post-doctoral fellows, 3 pre-doctoral fellows and 20 visiting scientists from 23 states, the District of Columbia, and 14 countries during the past fiscal year. The increasing numbers of students and scientists visiting SERC from many foreign countries and all parts of the United States provide crucial avenues for disseminating SERC's research findings and expertise.

Public Outreach - In FY 1999, a 10-part evening lecture series, *An Ecological History of the Chesapeake Bay*, attracted over one thousand attendees to SERC's Philip D. Reed Education Center. In May 1999, an open house for the local community drew 700 people, including first-time visitors from the low-income neighborhoods adjacent to the Center.

Exhibitions - In FY 1999, SERC took the traveling exhibition, *Tales of the Blue Crab*, to the Arts & Industries Building on the Mall. The exhibition provided scientific information on the morphology, life cycle, and habitat requirements of this important fishery species, along with its ecological importance in the Chesapeake Bay. Subsequently, the exhibition toured many classrooms and school fairs throughout Maryland. A companion teacher's guide and a student curriculum package were developed. A Web-based version of the exhibition came online in December 1999.

Publications - SERC staff published 65 articles in FY 1999. One of the most significant of these, published in *Ecology*, described the nutrient dynamics of wetlands with special emphasis on mangrove ecosystems in coastal zones of the tropics.

NONAPPROPRIATED RESOURCES - General Trust funds provide support for salaries and benefits of personnel, research, fund raising, interns, and fellowships. Donor/Sponsor Designated funds provide support for costs related to specific programs and projects, such as research, public education, and professional training. Government grants and contracts provide significant support for special projects at SERC that use the expertise of the staff to meet national goals for environmental research and education.

SMITHSONIAN TROPICAL RESEARCH INSTITUTE

	APPLICATION OF OPERATING RESOURCES							
	FEDERAL APPROPRIATIONS		GENERAL TRUST		DONOR/SPONSOR DESIGNATED		GOV'T GRANTS & CONTRACTS	
	FTE	$000	FTE	$000	FTE	$000	FTE	$000
FY 1999 ACTUAL	175	9,167	6	1,203	3	1,837	1	1,690
FY 2000 ESTIMATE	176	9,930	5	538	3	1,400	1	1,500
FY 2001 ESTIMATE	176	10,545	7	903	9	1,820	1	1,500

ABSTRACT - The unique, 75-year-long cooperation between the Smithsonian Institution and the Republic of Panama has provided one of the rare occasions where developed, temperate zone knowledge and funding have been applied consistently to tropical, developing zone diversity and complexity. With the implementation of the Panama Canal Treaty, the Smithsonian Tropical Research Institute (STRI) is now the largest U.S. presence in Panama. STRI maintains a core of resident scientists and enables several hundred visiting scientists and research fellows from around the world to address the fundamental scientific questions posed by the tropics in the disciplines of anthropology, archeology, geology and biology. Modern field facilities are available for marine and terrestrial research supported by one of the leading research libraries for tropical studies, a cutting-edge molecular facility, and a fully equipped research vessel. STRI has also pioneered special projects such as forest canopy research using construction cranes and field and laboratory experiments, including the first tropical, large scale, free air carbon dioxide enhancement project (FACE rings), to understand the role of elevated carbon in tropical forest ecology.

For FY 2000, the Smithsonian is not seeking additional funding for programmatic increases for the Smithsonian Tropical Research Institute. Included in the STRI line item, but justified in the Mandatory Increases section of this budget request, are funds to annualize the FY 2000 increase in personnel costs at STRI resulting from implementation of the 1977 Panama Canal Treaty ($330,000). This is being carried out through the establishment of a Smithsonian-specific employment program applicable to those employees covered by the labor laws of Panama. The Institution requires $285,000 for Necessary Pay for existing staff funded in this line item.

PROGRAM - STRI provides a remarkable array of field sites and laboratory and experimental facilities to ask a broad sweep of fundamental questions

about how the tropics function. Thirty-three full-time researchers and between 400 and 500 visiting scientists generate a diverse array of about 250 important scientific publications every year that help to offset the lack of data for this most diverse and crucial region of the globe.

Research - STRI scientists underpin their work with insight provided by geological and prehistorical research, especially the role of tropical peoples in the recent past and present. Knowledge about these fundamentals of tropical biological organization are applied to assessing and evaluating regional and global changes through long-term monitoring of key marine and terrestrial species, as well as the growing human impact on these changes. Much of this research can be directly applied to how to use and manage the forests and coral reef systems wisely.

One of the major areas of research today is the way in which the hydrologic cycle of the earth is affected by vegetation. STRI research involves the role of carbon in the different photosynthetic pathways of tropical plants, which also affect water loss and gas exchange—factors that on large regional scales modify climate and rainfall. Single-plant studies and small-scale open-top-chamber experiments will now be expanded to include large-scale 30-meter-diameter free air carbon dioxide enhancement (FACE) rings in which entire segments of forests can be grown in ambient and elevated CO_2 conditions.

Building upon more than 70 years of field research at Barro Colorado Island, STRI is now adding a unique array of molecular, physiological, and ecological research techniques to understanding how the extraordinary tropical forest diversity is generated and maintained, and how tropical forests function as ecosystems. This research incorporates the use of two construction cranes to contrast the biological role of the canopy of wet and dry tropical forests, and also includes a census of about three million trees worldwide (17 plots in 14 countries) every five years. These studies provide, for the first time, globally comparable data that should play a crucial role in guiding tropical forest conservation, management, and agricultural exploitation, as well as in answering fundamental research questions.

With the opening of the new marine research station at Bocas del Toro, in western Panama, a spectacular array of tropical coastal habitats have become accessible for study. Basic research programs, baseline biological surveys, and monitoring of coral reefs, seagrass, and mangrove systems—the three key habitats of tropical marine coastlines—are now well under way. Molecular and reproductive studies of the highly precise timing of spawning in corals and their complex relations with a newly discovered

range of algal symbionts are shedding new light on the basic ecology and functioning of coral reefs. The fact that corals in one area may have developed from larvae that come from populations thousands of kilometers distant requires regional coordinated monitoring and policies across large stretches of the ocean. The Bocas del Toro station is now an element of the Caribbean Coastal Marine Productivity Program's reef-monitoring system for the Caribbean.

Genetic relations, established through DNA testing, are defining transisthmian and Caribbean-wide patterns of speciation for echinoids, shrimp, birds, and fishes, as well as how and when some of these species have colonized remote Pacific islands and crossed the enormous marine barrier of the eastern Pacific. These fundamental studies are addressing basic questions of how species evolve and how these extended populations—meta populations—pose special conservation problems because they cross many national boundaries, and may involve the problems associated with invasive species.

Geological and anthropological studies at STRI seek to understand the historical events of natural and cultural change that have determined the present world. A cooperative research project, involving 32 scientists in several countries, is attempting to reconstruct the timing and paleogeography of the rise of the Isthmus of Panama and to understand how these changes have affected the surrounding oceans and the evolution and ecology of species in the sea. This is an example of how regional and global environmental changes occur and provides constraints on predictive models of global change for the future.

Education/Outreach - STRI also trains students in tropical research, and promotes greater public understanding and awareness of the importance and fragility of tropical flora, fauna and cultures to promote their conservation. The training of students is provided through fellowships in support of students and researchers from the undergraduate to the postdoctoral level. Some internships are also provided to give hands-on tropical research training, and are usually supported by funds from individual research programs. In addition STRI provides logistical and content support for several tropical field programs in Panama run by universities in North America, such as the University of Pennsylvania, McGill University, and Princeton University.

STRI's public education program for members of the community and visitors to Panama includes weekly guided tours to Barro Colorado Island, a monthly lecture series by researchers at STRI in the Metropolitan Natural Park, daily visits by school groups and the general public to STRI's Marine

Exhibition Center, and public exhibits on view at STRI's Tupper Exhibit Hall. STRI also has exhibits on the Web and produces publications based on its research for public audiences. STRI's outreach programs to the community have expanded in the last five years and are increasingly important to ensure that its research is understood and appreciated by the public and that its work sites are protected for the future.

NONAPPROPRIATED RESOURCES - General Trust funds provide support for salaries and benefits of personnel. In addition, these funds provide general support for research, fellowships, publications, and fund raising. Donor/Sponsor Designated funds provide support for costs related to specific programs and projects, such as research and the purchase of scientific equipment. Government grants and contracts provide support for research, internships, and symposia.

COMMUNICATIONS AND EDUCATIONAL PROGRAMS

	APPLICATION OF OPERATING RESOURCES							
	FEDERAL APPROPRIATIONS		GENERAL TRUST		DONOR/SPONSOR DESIGNATED		GOV'T GRANTS & CONTRACTS	
	FTE	$000	FTE	$000	FTE	$000	FTE	$000
FY 1999 ACTUAL	72	4,837	48	5,264	9	1,421	0	1,810
FY 2000 ESTIMATE	71	5,379	54	8,723	9	2,432	6	2,129
FY 2001 ESTIMATE	71	5,533	54	8,680	8	1,381	6	2,214

ABSTRACT - The Smithsonian's communications and educational programs promote the building of academic, scholarly, and community-based ties with the public, educational centers, and institutions throughout the Nation. This line item includes the National Science Resources Center, the Office of Fellowships and Grants, the Office of Public Affairs, Smithsonian Institution Press, the Smithsonian Center for Education and Museum Studies, Smithsonian Productions, and the Visitor Information and Associates' Reception Center.

For FY 2001, the Smithsonian is not seeking additional funding for programmatic increases for communications and educational programs. The Institution requires $154,000 for Necessary Pay for existing staff funded in this line item.

PROGRAM - National Science Resources Center (NSRC) - The National Science Resources Center (NSRC) works to improve the quality of science education in the nation's elementary and secondary schools. NSRC's programs place a special emphasis on stimulating an interest in science among women and minorities, and on assisting school districts that serve large numbers of minority students. NSRC supports systemic science education reform efforts in communities across the nation through its materials development, information dissemination, and outreach programs.

NSRC's *Science and Technology for Children* (STC) is a complete classroom science education program for grades one through six, which uses simple, inexpensive materials to teach science through hands-on investigations. NSRC is developing a *Science and Technology Concepts for Middle Schools* project for grades seven and eight. NSRC's information dissemination activities are designed to make information on high-quality science curriculum materials and related resources accessible to teachers,

administrators, and scientists working to improve science education. NSRC is also developing a website to enable local school districts to access information and resources often not otherwise available. NSRC's outreach programs provide science education leadership development and technical assistance; since 1989, NSRC has sponsored 27 Science Education Leadership Institutes with attendance from over 400 school districts located in 45 states and Puerto Rico. NSRC has begun a five-year Leadership and Assistance for Science Education Reform initiative that, through partnerships, will provide a comprehensive program of science education training programs, publications, and technical assistance to 300 school districts nationwide.

All National Science Resources Center programs stress the involvement and collaboration of teachers, and scientists and engineers from business and industry, as well as academia, in the development and implementation of NSRC programs.

Office of Fellowships and Grants - The Office of Fellowships and Grants manages the Institution's centralized fellowship and internship programs, all other stipend appointments, and competitive Trust-funded grant programs that support research and other scholarly activities of Smithsonian staff and their collaborators. One of its primary objectives is the facilitation of the Smithsonian's scholarly interactions with students and scholars at universities, museums, and other research institutions around the world.

The fellowship programs, such as the Latino Studies Fellowship Program and the Smithsonian Institution Fellowship Program, provide students and scholars with opportunities to pursue independent research projects in association with members of the Smithsonian professional research staff. The internship programs, such as the Minority Internships and Native American Internships, are a prearranged, structured learning experience that is relevant to the interns' academic and professional goals, and to research and museum activities of the Institution.

Office of Public Affairs (OPA) - The Office of Public Affairs acquaints the public and staff with the programs and policies of the Institution through a variety of publications and by working with newspapers, magazines, television, and radio to gain media exposure for its exhibits, public events, and research. Publications issued by OPA include a visitor information brochure in seven languages; *Smithsonian Access*, for disabled visitors; a series of four brochures describing resources for African American, Latino, Native American and Asian Pacific American audiences; a quarterly newsletter, *Research Reports*; the monthly employee

newspaper *The Torch*; and a biweekly newsletter with news for staff. OPA produces *Smithsonian Year*, the Institution's annual report, in conjunction with the Smithsonian Institution Press, and a monthly full-page advertisement in *The Washington Post* on events and exhibitions around the Institution. A major goal of OPA is to encourage culturally diverse audiences to take advantage of the many resources of the Smithsonian.

Smithsonian Institution Press (SIP) - The Smithsonian Institution Press disseminates the highest quality scholarship and research to academic and educated lay readers through the publication of well-crafted books in fields reflecting the research and collections strengths of the Smithsonian Institution. These publications support the programmatic, education, outreach, and audience development goals of the Institution. SIP is a leading publisher in American studies and popular culture, anthropology and archaeology, aviation and space history, museum studies, and the natural sciences, including biodiversity studies. SIP published 40 books in 1999, receiving numerous awards which included the Wildlife Society's Outstanding Book Award (*Salamanders of the United States and Canada,* by James Petranka); Outstanding Edited Book Award (*Bat Biology and Conservation,* edited by Thomas Kunz and Paul Racey); and the American Recorded Sound Collections Book Award for Excellence in Historical Research, for *Making People's Music: Moe Asch and Folkways Records,* by Peter D. Goldsmith.

Smithsonian Center for Education and Museum Studies (SCEMS) - The Smithsonian Center for Education and Museum Studies interprets the collective knowledge of the Smithsonian and serves as a gateway to the Institution's educational resources. Through publishing and professional development programs for the education and museum communities, the SCEMS promotes the understanding and use of museums. SCEMS also serves and provides leadership to the Smithsonian education community and coordinates outreach initiatives to diverse audiences.

SCEMS, along with Brent Elementary and Stuart Hobson Middle Schools in the District of Columbia, cosponsors two museum magnet schools. These magnet schools use museum visits to build students' math, reading, writing, and problem-solving skills. An innovative year long school-wide exhibition process unifies student investigations and provides measurable evidence of student learning. *Teacher's Night at the Smithsonian* introduces representatives of area schools to museums and research units, giving participants new ideas about making use of the Smithsonian's resources. SCEMS publishes *Smithsonian Field Guide for Educators*, which details tours and programs for students and professional development opportunities for educators. The *Smithsonian Education*

website delivers the content of the print publications and includes several Web-only features. Visits to the website average 2,500 per day.

Smithsonian Productions - Smithsonian Productions is the electronic media production center for the Smithsonian, supporting and presenting the research and exhibition activities of the Institution's museums and research institutes. The unit develops and creates television and radio programs, exhibition videos, and online media, sharing the Smithsonian's vast resources with millions in the United States and abroad.

The office provides planning, production, and consulting services to all Smithsonian units in the creation of media programs for exhibitions and education; and develops, secures funding for, and manages production of television and radio projects for national and international distribution, that reflect the Institution's programmatic goals and interests. In addition, Smithsonian Productions provides production, digitization, and compression services for the development of video materials for Smithsonian websites. Using new hardware and software, Smithsonian Productions staff are selecting material from their vast archive and editing segments for use on the Institution's new site, *The Virtual Smithsonian*, set to debut in 2000. The spread of broadband Internet connections, along with the convergence of Web and video technologies, will make this area the vehicle for expansion in public access to Smithsonian resources.

Visitor Information and Associates' Reception Center (VIARC) - The Visitor Information and Associates' Reception Center seeks both to broaden the public's knowledge, appreciation, and enjoyment of the Smithsonian and to facilitate and promote participation in its programs and activities. As a central support organization and the principal contact point for information about the Institution, VIARC's work is carried out through the Smithsonian Information Center; 17 information/member reception desks; response services for public and member mail, telephone, and electronic inquiries; outreach to the tourism industry; outdoor way-finding stations; and volunteer programs that provide primary support for the Institution's public information activities and for behind-the-scenes staff project assistance.

NONAPPROPRIATED RESOURCES - General Trust funds provide support for salaries and benefits of personnel and other related costs. In addition, these funds provide general support for information dissemination, outreach, publications, and general operations. Donor/Sponsor Designated funds support costs related to specific programs and projects. Government grants and contracts provide additional support for resource materials development, information dissemination, and outreach.

INSTITUTION-WIDE PROGRAMS

	APPLICATION OF OPERATING RESOURCES							
	FEDERAL APPROPRIATIONS		GENERAL TRUST		DONOR/SPONSOR DESIGNATED		GOV'T GRANTS & CONTRACTS	
	FTE	$000	FTE	$000	FTE	$000	FTE	$000
FY 1999 ACTUAL	0	4,060	0	0	0	0	0	0
FY 2000 ESTIMATE	0	5,693	0	0	0	0	0	0
FY 2001 ESTIMATE	0	8,693	0	0	0	0	0	0

ABSTRACT - As part of the restructuring plan reviewed and approved by Congress in 1993, the Smithsonian reallocated funds to create two Institution-wide funding programs: one supports the units' needs to replace, upgrade, and acquire new research equipment; the other enables the myriad of information technology needs across the Institution to be addressed systematically. In FY 1995, the Institution began to receive funds to support the development of a third Institution-wide program for Latino programming. These funds are important to meet the on-going need to acquire state-of-the-art research equipment, continue to improve the information infrastructure and systems, and increase Latino programs, research and collections.

For FY 2001, the Smithsonian requests an increase of $3,000,000 to make more of its collections and knowledge accessible to a broader audience, including the electronic capture, storage, and access to its collections, information and images in the museums, archives, and libraries and to support expansion of affiliate relationships across the country. The Institution requests that the funding in this line item remain available until expended.

CURRENT PROGRAMS

Research Equipment - The research equipment program continues to fund basic research equipment needs of the Institution. Requirements to replace outdated and dysfunctional equipment and acquire new research tools far exceed the existing base funds of $1,885,000. Each year, unit directors in the museums, research centers and research support offices determine the most effective application of the funds to meet the highest priority needs.

Examples of recent purchases include:

- Scientists at the Smithsonian Tropical Research Institute (STRI) in Panama have benefited from the purchase of night vision imaging and infra-red video recording equipment. Nocturnal animals and plants represent one of the last frontiers in tropical biology, and their activities were difficult to study until technology provided scientists with the capability to see in the dark. Studies exploring the behavior of nocturnal bees have begun in Panama.

- A very high-quality 3-chip camera that produces high-resolution details and color will be used in the conservation laboratories for analysis, treatment, teaching and documentation at the Cooper-Hewitt, National Design Museum in New York City.

- A scanning electron microscope which allows the study of botanical specimens for greatly extended periods was among the items purchased by the National Museum of Natural History.

- An automated DNA sequencer adds a significant dimension to the ability of the National Zoological Park's (NZP) Molecular Genetic Lab to conduct analyses of biological diversity. One such project on the genetics of an introduced mosquito that transmits avian malaria to native Hawaiian birds has revealed that there has been a secondary invasion from Asian populations, which may have caused the increased virulence of the malaria parasite in Hawaii. In addition, a new laboratory microscope for the Department of Pathology was instrumental in monitoring blood cell elements using phase microscopy for the NZP's recently deceased 28-year old giant panda, Hsing-Hsing. This led to new treatments that prolonged and improved the panda's quality of life and added to the knowledge base of exotic-carnivore medicine.

Information Technology and Collections Access – In order to improve management of its vast resources and to share them with researchers, other museums, educators, parents, students and the public at large, the Smithsonian is greatly increasing its use of technology and expanding its affiliate relationships across the country. In FY 1999, base funds of $2,810,000 supported an Institution-wide network, various automated resources management systems, collections information systems and related digitization projects, as well as software application development and upgrades. A portion of this program provides an infrastructure upon which the Institution's programming for the Web can be extended to all

electronic visitors. Schools, libraries, and homes across the Nation now have the ability to make electronic visits to their National museums via the Smithsonian's popular websites. Programming for the Web is an important new responsibility of each museum, research institute and program office. Public expectations of website offerings increase daily.

The Smithsonian Institution Research Information System (SIRIS) is an integrated information system containing over 1.2 million records serving the public access, cataloging, circulation, and acquisitions needs of the Smithsonian Institution Libraries, seven Smithsonian archival units, inventories of American painting and American sculpture, and several Smithsonian research databases. In 1999, the Institution signed a contract to replace the existing mainframe-based system with a more flexible and effective client-server-based system. Intensive planning, testing, configuration, and conversion followed. The Libraries' database was converted and operational on December 15, 1999. The remaining databases will follow shortly.

Also in 1999, the Institution began an aggressive process to digitize images of the collections. Funds were distributed to the museums to deliver 250,000 images. These images will be archived for permanent use and made available to the public through the Smithsonian On-Line Collections System to be launched early in 2000.

Latino Exhibitions, Acquisitions, and Educational Programming - The Institution has $998,000 in its base to support exhibitions, research, and educational initiatives that illuminate and highlight Latino contributions to America and permit a wider sharing of Latino accomplishments in the sciences, humanities and performing arts. Designated as the Latino Initiatives Fund, these funds are dispersed annually to Smithsonian units on a competitive basis, with an emphasis on projects with the potential to attract matching and, ultimately, sustaining funds from non-Federal sources.

During FY 1999, the Smithsonian Center for Latino Initiatives administered a call for proposals and granted awards to 45 projects. Grants ranged from $2,000 to $97,000, covering initiatives in research, collections enhancement and preservation, exhibitions, recognition and performances of Latino artists, education, outreach, and training, as well as the creation of national networks and information systems for communicating the programs at the Smithsonian.

The Center for Latino Initiatives hosted the sixth *Interpreting Latino Cultures: Research and Museums* seminar on qualitative methodology. The

seminar is organized by the Center and co-sponsored by the Inter-university Program for Latino Research (IUPLR) with support from the Rockefeller Foundation. Fifteen Latino graduate students from universities around the country participated in the program, as well as invited faculty and keynote speakers. The fund and the Center support all participants and faculty travel costs. These funds allow the Center to continue to expand research opportunities for Latino scholars in the humanities by sponsoring humanities fellowships in Latino cultural research.

Among the other projects funded were:

- Postdoctoral research awards for study at the Smithsonian and internship awards for hands-on experience within the museums and research institutes
- Hands-on summer workshop for museum specialists and scholars
- A variety of exhibitions including: Latino pioneers in aviation history at the National Air and Space Museum; Los Angeles Latino communities at the Cooper-Hewitt, National Design Museum; *A Collector's Vision of Puerto Rico* and *Americanos: Latino Life in the USA* at the National Museum of American History
- Promotion of over 10 programs aimed at Latino youth and communities involving specific events and outreach efforts
- A series of lectures/panels to complement the Smithsonian Associates performances on the *Musica de las Americas* which recognized legendary performers of Latin music

EXPLANATION OF PROGRAM INCREASE – Increasingly, the Smithsonian has been under pressure to share the National collections and associated research information with the Nation. For FY 2001, the Smithsonian requests an increase of $3,000,000 to support ways to make more of its collections and knowledge accessible to a broader audience. The Institution requests that the funding in this increase remain available until expended.

The Smithsonian is the world's largest repository of taxonomic specimens. Scores of scientists and explorers have left their research findings and collections with the Institution. With present concerns over biodiversity, this information is ever more crucial, and it too needs to be converted electronically to a medium that will allow widespread access. The educational value of the Institution's scholarship and collections is obvious. Access to Smithsonian objects, experience, and scholarship has always proven valuable, and increasing the scope and reach of these resources will expand the benefits. This vast storehouse of knowledge can, and should be, shared with significantly more people.

The Smithsonian has been responding to this challenge. In 1995, the Institution established its initial website. Since then, collections information systems have been upgraded and expanded in order to make them more widely available.

- In FY 1998, Congressional funding of $960,000 allowed Institution-wide automation of these systems to begin.

- In FY 1999 and FY 2000, selected records for all of the objects recorded in CIS databases are being extracted into a single central database. In FY 1999, Freer-Sackler received funding to digitize its entire collection, as were the National Zoological Park's collection and some 8,000 of the National Museum of Natural History's objects. Digitized images are captured both for public display on the Institution's website and for central archival purposes.

- The National Museum of American History opened an exhibit, *Digilab*, that features state-of-the-art techniques. As part of the exhibit, some 25,000 objects from the Vidal collection will be digitized and several corporations that have funded the exhibition or donated hardware will use the exhibit to showcase emerging digitization technology.

- The Hirshhorn Museum and Sculpture Garden has on-site digitization of its collections underway.

- Smithsonian Libraries use digitization both to broaden their user base and to make rare books available to greater numbers of researchers. This practice has the ancillary benefit of protecting rare manuscripts, because it eliminates repeated handling of them.

Public exhibitions, the mainstay of the museum world, are taking on a new dimension in the age of the Internet. Physical exhibitions can be enhanced electronically, while virtual exhibitions become common adjuncts of physical ones. Museums also are beginning to experiment with exhibitions that occur only in cyberspace, and which are usually much less expensive than physical ones. This also makes collections available to even more people.

With electronic access has come increased awareness of the breadth and depth of the National Collections. Increasingly, communities across the country are seeking affiliate relationships with the Institution to gain greater

long-term access to collections, exhibits, programs, and related Smithsonian expertise. Building on an increasing Web presence and strong programs already in place, such as those of the Smithsonian Institution Traveling Exhibition Service, the Smithsonian Associates, the annual Folklife Festival, and the science and museum programs of the Smithsonian Center for Education and Museum Services and the National Science Resources Center, these relationships, formalized by action of the Board of Regents in September 1996, continue to evolve in myriad forms. Coordinated planning is underway to broaden this outreach and expand access to the richness of our heritage.

The $3,000,000 requested in FY 2001 will be used to continue the effort to make Smithsonian resources more widely available. Additional items will be digitized, the Digital Library will be upgraded and maintained to handle the additional records digitized each year, and the search capability and public interface will be improved to assist with specific searches as the number of records available increases. The selection of images and associated information from individual Collections Information Systems in a central server results in the Smithsonian's On-Line Collections System (SOCS), adding a new dimension to the Internet audience's ability to find and learn from the Smithsonian's vast collections of research and educational materials. It will provide the raw material for the website, content for educational materials and research projects, and for entertainment and unstructured investigation. Linking resources from throughout the Institution will provide a more exciting and useful panorama of information and provoke even greater interest in the Institution's collections. The ability to locate information from all the Smithsonian's collections with a single, consolidated search capability will facilitate a more comprehensive understanding of related materials. It will also complement the linkages available through more conventional Web links, provide greater access to the public and encourage more exploration and use of the Smithsonian's materials.

OFFICE OF EXHIBITS CENTRAL

	APPLICATION OF OPERATING RESOURCES							
	FEDERAL APPROPRIATIONS		GENERAL TRUST		DONOR/SPONSOR DESIGNATED		GOV'T GRANTS & CONTRACTS	
	FTE	$000	FTE	$000	FTE	$000	FTE	$000
FY 1999 ACTUAL	40	2,237	1	99	0	88	0	0
FY 2000 ESTIMATE	40	2,319	1	105	0	20	0	0
FY 2001 ESTIMATE	40	2,414	1	106	0	30	0	0

ABSTRACT - The Office of Exhibits Central (OEC) is the Smithsonian Institution's most comprehensive exhibit producer. OEC is expert in the specialized needs of traveling, temporary, and permanent exhibitions, including design, editing, graphics, model-making, fabrication, crating, and installation. OEC is also involved in concept development, object selection, product research, and prototype testing; makes recommendations about the need for conservation assistance; and conducts training in exhibit design and production with museums across the country and abroad.

For FY 2001, the Smithsonian is not seeking additional funding for programmatic increases for the Office of Exhibits Central. The Institution requires $95,000 for Necessary Pay for existing staff funded in this line item.

PROGRAM - The Office of Exhibits Central is a full-service organization with specialized teams in design, editing, graphics, model-making, and fabrication. The design and editing team works with a curator's preliminary ideas to develop an overall exhibition plan. Exhibit designers are responsible for all aspects of visual presentation. OEC's exhibit editors work closely with designers and subject specialists to ensure that words, design, graphics, and artifacts work together to create an effective presentation. The graphics team provides silk-screening, typesetting, photo mounting, vinyl lettering, and conservation matting and framing. The model-making team creates scientifically and historically accurate dioramas, models, and mannequins. It also brackets artifacts for display and offers taxidermy services. The fabrication team constructs fine cabinetry and exhibit components. The packing and shipping team builds crates and packs exhibitions that travel across the country and around the world.

The Smithsonian Traveling Exhibition Service (SITES) was OEC's main client for 1999. OEC designed and produced the exhibitions, *On Miniature Wings: Model Aircraft from the National Air and Space Museum*; *The Jazz Age in Paris, 1914-1940*; and *Creativity and Resistance: Maroon Cultures in the Americas.* OEC also produced a large portion of the exhibition *This Land is Your Land: The Life and Legacy of Woody Guthrie.* OEC provided extensive exhibition dispersal and refurbishment services for the many SITES exhibitions traveling throughout the United States.

A few of the other major exhibition design and production services OEC provided in 1999 are: the design and production of the exhibition *Between a Rock and a Hard Place;* the design and fabrication of the Clockman, the signature exhibition piece for the *Time Out* exhibition; and the production of the full-size interactives for the *Piano 300* exhibition for the National Museum of American History. For the National Museum of Natural History, OEC produced a life-size re-creation of an Ainu traditional house (chise) for *Ainu: Spirit of a Northern People* and produced a new elephant diorama for the renovation of the Museum's Rotunda.

Some other highlights include the design, model making and installation for the Smithsonian venue of *Microbes: Invisible Invaders, Amazing Allies* for the International Gallery; *Make the Dirt Fly! Building the Panama Canal* for the Smithsonian Institution Libraries; *Vanishing Amphibians* (Spanish-language version) for the Smithsonian Tropical Research Institute (STRI); exhibit cases for *Instrument of Change: James Schoppert Retrospective* at the George Gustav Heye Center of the National Museum of the American Indian; and the design and creation of the award for the Smithsonian Exhibition Award program.

OEC also provided specialized services such as long-term-design consultation for the Arts and Industries Building and the design and fabrication of the donation boxes for the National Air and Space Museum. OEC furthered the Institution's website and digitization initiatives by offering consultations, editing, and/or content development expertise on several projects, including The Millennium Project website.

Future projects for OEC include the *Burgess Shale: Evolution's Big Bang* exhibition for SITES; an inaugural exhibition for the National Museum of the American Indian; and the extensive renovation of exhibitions in the mammal halls at the National Museum of Natural History.

NONAPPROPRIATED RESOURCES - General Trust funds provide support for salaries and benefits of personnel and associated costs.

MAJOR SCIENTIFIC INSTRUMENTATION

	APPLICATION OF OPERATING RESOURCES							
	FEDERAL APPROPRIATIONS		GENERAL TRUST		DONOR/SPONSOR DESIGNATED		GOV'T GRANTS & CONTRACTS	
	FTE	$000	FTE	$000	FTE	$000	FTE	$000
FY 1999 ACTUAL	0	9,984	0	0	0	0	0	0
FY 2000 ESTIMATE	0	7,244	0	0	0	0	0	0
FY 2001 ESTIMATE	0	7,244	0	0	0	0	0	0

ABSTRACT - The development of major scientific instrumentation is vital to Smithsonian scientists remaining at the forefront of their fields. Because of the magnitude of the costs and the time required to fabricate major new instruments and to reconfigure existing ones, the Institution requests funding for such projects under this line item, rather than under individual ones. Since these projects require long-term development and multi-year funding, the Institution also requests that funds in this line item remain available until expended.

For FY 2001, base funds will be used by the Smithsonian Astrophysical Observatory (SAO) to continue construction of the submillimeter telescope array ($3,269,000), and development of instrumentation for the converted Multiple Mirror Telescope ($3,500,000). The remaining base funds of $475,000 will be redirected from the submillimeter telescope project and used by the National Museum of Natural History to purchase Focused Ion Beam instrumentation. The Institution is not seeking additional programmatic increases for Major Scientific Instrumentation.

PROGRAM - Since FY 1989, the Smithsonian has received funding under this line item for two SAO projects: development of an array of submillimeter telescopes and conversion of the Multiple Mirror Telescope (MMT). SAO began operation of the Submillimeter Telescope Array in Hawaii with two elements in September 1999.

Construction of an Array of Submillimeter Wavelength Telescopes - The last frontier of ground-based astronomy consists of observing the skies with telescopes sensitive to submillimeter waves—light with wavelengths between those of infrared and radio waves. SAO plays a major role in emerging submillimeter astronomy. Since FY 1992, SAO has been

constructing components for its submillimeter array (SMA) of telescopes that is being located on Mauna Kea in Hawaii. When completed, the SMA will consist of eight movable antennas, two of which will be provided by the Academia Sinica Institute of Astronomy and Astrophysics, Taiwan. The first two antennas have been erected and checked out on Mauna Kea. They were first operated as an interferometer on September 29, 1999. Additional antennas will be inserted into the array and preliminary astronomical observations will begin in FY 2000.

The submillimeter array, with its unprecedented combination of wavelength coverage and ability to resolve fine spatial details, will enable SAO scientists to play a major role in understanding the processes by which stars and planets form and the mechanisms that generate prodigious amounts of energy in quasars and in active galaxies. When operational, the SMA will be a major scientific instrument of international stature. The array will be unique in the world in its combination of wavelength coverage and resolving power, and it will measurably enhance the scientific competitiveness of the United States.

In FY 2001, funding will be used for assembly and testing of the remaining two antennas and shipment to Hilo; pad preparation at the site on Mauna Kea; construction of the receivers; building of the electronics/ correlator systems; and equipment and supplies. By the end of FY 2001, SAO will operate a total of six antennas on the top of Mauna Kea.

Conversion of the Multiple Mirror Telescope - In March 1999, the staff of the MMT Observatory installed the 6.5-meter primary mirror for the conversion of the Multiple Mirror Telescope. The delicate procedure of lowering the giant 10-ton mirror into the telescope building and through the telescope structure proceeded smoothly, thanks to careful preparations and tests with a surrogate mirror. Since March, the MMT staff has brought into operation the mirror support system, the motors and software required to point the telescope and track celestial objects, and the equipment required to deposit the aluminum reflective coating on the 6.5-meter mirror. In the fall of 1999, the primary mirror support system was adjusted using star images at its focus. In late 1999, the first secondary mirror was installed and tested, clearing the way for the first scientific use of the telescope in early 2000.

FY 2001 funding will be used for procurement of major detectors and components of the camera, and to complete design and procurement of optics for the BINOSPEC, a dual-beam, wide-field spectograph.

Focused Ion Beam - In FY 2001, the Natural Museum of Natural History (NMNH) will use major scientific instrumentation base funding of $475,000 for Focused Ion Beam (FIB) instrumentation. It is anticipated that funding for this purpose will be one-time only. FIB instrumentation is a mission-critical technology used by the semiconductor industry to both visualize and analyze ever-shrinking components that comprise microelectronic devices. The possibilities for applying FIB technology to reveal the intricacies of natural materials are vast. The National collections of Meteorites, Gems/Minerals, Rocks/Ores, as well as those curated by biological departments at the NMNH, are of unparalleled quality. It is these unique collections that offer Smithsonian scientists the ability to exploit this cutting-edge tool in ways unattainable in other research environments. The FIB will be applied to problems involving some of the most precious extraterrestrial specimens, those from Mars, to diamond synthesis, and to the origin of life on Earth. Early leadership in this embryonic field means the NMNH is uniquely poised to utilize and develop the imaging and analysis capabilities for frontier studies of inorganic and organic materials from Earth, as well as samples of our solar system and universe.

The FY 2001 funds will be used to purchase a mass spectrometer to analyze extremely small regions of specimens, as well as additional hardware to modify the spectrometer for enhanced chemical sensitivity. The additional hardware includes a gas injection system (for etching or depositing on sample surfaces), an optical microscope (for specimen viewing at low magnification), a micromanipulator and microscopy workstation (to remove sectioned samples for further study by transmission electron microscopy), a software package to automate for unattended work, and a cryogenic stage to freeze specimens during analysis. Funds will also be used for contract software engineering required by the development of new instrumentation. The Institution will use restricted endowment funds for approximately one-third of the costs of this effort.

Two examples of results from reconnaissance work display the power of FIB microscopy and analysis: examination of a Martian meteorite has led to the discovery of evidence for multiple episodes of liquid water flowing beneath the red planet, precisely the environment one would search for extraterrestrial life; and the delicate cell walls of some of the earliest well-preserved life forms on Earth have recently been visualized by mapping carbon with the analytical FIB. It is clear from these early studies that the FIB will undoubtedly play a leading role in addressing the long sought-after goal of learning whether life is unique to planet Earth. With the acquisition of the equipment and resources listed above, coupled with development efforts at the Smithsonian, a new class of scientific problems at near atomic length-scales can now be approached for the first time.

MUSEUM SUPPORT CENTER

	APPLICATION OF OPERATING RESOURCES							
	FEDERAL APPROPRIATIONS		GENERAL TRUST		DONOR/SPONSOR DESIGNATED		GOV'T GRANTS & CONTRACTS	
	FTE	$000	FTE	$000	FTE	$000	FTE	$000
FY 1999 ACTUAL	69	4,698	0	9	0	0	0	0
FY 2000 ESTIMATE	69	4,491	0	0	0	0	0	0
FY 2001 ESTIMATE	69	3,562	0	0	0	0	0	0

ABSTRACT - The Museum Support Center (MSC) provides state-of-the-art technology for scientific research, conservation, and collections storage in a specially equipped and environmentally controlled facility located in Suitland, Maryland.

For FY 2001, the Smithsonian is not seeking additional funding for programmatic increases for the Museum Support Center. FY 2001 Non-recurring Costs include $1,000,000 for MSC equipment. The Institution requires $71,000 for Necessary Pay for existing staff funded in this line item. As in prior years, the Institution requests that the funds for MSC collections storage equipment and move costs remain available until expended.

PROGRAM - Specially-designed, state-of-the-art storage equipment is available at MSC to house the more than 31 million objects and object parts being relocated from the National Museum of Natural History (NMNH) and the National Museum of American History (NMAH). MSC accommodates collections storage in four sections (or pods) for three general types of needs: collections storage in cabinets, open shelving for biological specimens in alcohol, and high bay storage for very large objects. The facility also houses the Smithsonian Center for Materials Research and Education, as well as NMNH laboratories for molecular systematics, conservation, and other specialized research.

MSC Operations - The MSC staff provide administrative and shipping and receiving services, oversees safety and security operations, and maintains strict environmental and cleaning services required for the proper storage of museum collections. Staff also provide computer support services for administrative, research, and collections management data needs at MSC, the National Air and Space Museum's Paul E. Garber

Facility and the National Museum of the American Indian's Cultural Resource Center.

MSC Collections Storage Equipment - At the end of 1999 storage equipment was installed in 95 percent of Pod 2 and 100 percent of Pod 4, with installation of high bay storage equipment in Pod 4. The Institution is continuing to procure and install the balance of the collections storage equipment for Pod 2. Design continues on the shelving system to house collections stored in alcohol in Pod 3. Twenty-five percent of Pod 3's storage equipment is presently installed.

MSC Collections Move - The characteristics, variety, volume and scope of the move of Smithsonian collections to MSC, considering the extensive preparation and traveling distance of millions of objects and specimens from the nine curatorial departments in two different museums, is unprecedented in the museum world and poses special challenges that must be addressed as part of the move. MSC Move staff technicians inspect the objects for pests and conservation problems, clean them, and stabilize them prior to their move. The collections relocated to MSC are properly curated, less crowded, and subject to better environmental control than collections in many other museum storage areas. Further, the relocation of collections to MSC provides improved access to those collections, including expanded use of electronic collections information technology. As a result, they have far better prospects for long term preservation and are significantly more accessible to researchers.

During FY 1999, the Smithsonian continued to make progress on the transfer of collections and will continue to move collections to MSC in FY 2000. In FY 2000, collections from Anthropology, Vertebrate Zoology, Paleobiology in NMNH, and NMAH collections are to be relocated to the high bay area of Pod 4. Preparation of oversized specimens, such as Native American boats and totem poles and stone figures from Central and South America that will be stored on the new shelving equipment system, is currently underway and scheduled to be completed in FY 2001.

SMITHSONIAN INSTITUTION ARCHIVES

	APPLICATION OF OPERATING RESOURCES							
	FEDERAL APPROPRIATIONS		GENERAL TRUST		DONOR/SPONSOR DESIGNATED		GOV'T GRANTS & CONTRACTS	
	FTE	$000	FTE	$000	FTE	$000	FTE	$000
FY 1999 ACTUAL	24	1,451	3	144	1	49	0	0
FY 2000 ESTIMATE	24	1,493	3	261	1	57	0	0
FY 2001 ESTIMATE	24	1,559	2	231	0	10	0	0

ABSTRACT - The Smithsonian Institution Archives (SIA) assures historical accountability for Institutional actions and programs, provides a resource for the study of American science, culture, and museum development, and fosters sound management of the National Collections.

For 2001, the Smithsonian is not seeking additional funding for programmatic increases for the Smithsonian Institution Archives. The Institution requires $66,000 for Necessary Pay for existing staff funded by this line item.

PROGRAM - The Archives maintains the historical records of the Institution, creates tools and products providing access to Smithsonian history, assists offices in managing their paper and electronic records, and oversees the collections management policy of the Institution.

Research - Scholars, curators, and administrators increasingly drew upon the resources of the archives with over 4,000 research inquiries during FY 1999. Topics ranged from the history of the *First Ladies Collection* to the relationship between Joseph Hirshhorn and Alexander Calder. Among the users were the Discovery Channel, the Learning Channel, and *The American Experience* on PBS which researched pandas, the Hope Diamond, and the explorer John Wesley Powell, respectively.

Throughout the year, the Archives hosted research associates and collaborators, and supervised numerous fellows, interns and volunteers. The annual *Research in Progress* lecture series continued, with presentations by scholars throughout the Institution as well as SIA staff.

Collections Management - Consistent with the Institution's goal of providing improved storage, staff completed a disposition schedule for the

Cooper-Hewitt, National Design Museum, rehoused over 900 cubic feet of high value collections, and instituted a program of integrated pest management. The staff also rewrote the procedures manual on acquisition, retention, and disposal of official Smithsonian records, and coordinated the preparation of the Institution's guidelines on collections management, which were reviewed by the Board of Regents in May 1999. In conjunction with its electronic records program, the Archives tested and planned for the move of core collections data to new online systems and conducted a pilot program for managing email in the National Museum of American History.

The Archives added new oral histories as well as 560 cubic feet of records and personal papers to its existing holdings. Staff began work on preserving deteriorating tapes from older oral history interviews and continued to appraise and preserve thousands of film and video materials held by Smithsonian Productions. The Archives also transferred 1,500 cubic feet of SIA records and over 700 feet of other Smithsonian records to National Underground Storage, a remote facility in Pennsylvania which provides environmentally secure storage for overflow archival collections.

Publications - Staff compiled and published the *1998 Smithsonian Institution Collections Statistics*, and began work on *Smithsonian Institution Annals*. Responsibility for the *Annals* was transferred from the Smithsonian Institution Press to SIA in 1999, and compilation of the 1997 and 1998 *Annals* began during this fiscal year. In addition, Volume 8 of *The Papers of Joseph Henry* was published in FY 1999.

Outreach/Public Programs - New electronic initiatives included digitizing and placing on line 3,000 photographs from Archives' holdings, and creating a website of documents relating to the origin and history of the Smithsonian Institution from 1829 to 2000. In addition, the Archives joined the multi-institutional *Model Editions* project, which is designed to explore standards and methods for moving documentary publications to the digital environment.

To facilitate electronic outreach, the Archives redesigned the home page of its website and added many new features, including an exhibit entitled *Baird's Dream: History of the Arts and Industries Building,* and a guide to *United States Fish and Wildlife Service, Field Reports, 1860-1961.*

NONAPPROPRIATED RESOURCES - General Trust funds provide partial support for the Joseph Henry Papers project, appraisal of audio-visual materials, special preservation projects, specialized databases, and other programmatic activities.

SMITHSONIAN INSTITUTION LIBRARIES

	APPLICATION OF OPERATING RESOURCES							
	FEDERAL APPROPRIATIONS		GENERAL TRUST		DONOR/SPONSOR DESIGNATED		GOV'T GRANTS & CONTRACTS	
	FTE	$000	FTE	$000	FTE	$000	FTE	$000
FY 1999 ACTUAL	109	6,711	9	884	1	185	0	0
FY 2000 ESTIMATE	109	7,273	11	913	1	268	0	0
FY 2001 ESTIMATE	109	7,489	11	943	1	454	0	0

ABSTRACT - The Smithsonian Institution Libraries (SIL) acquires, organizes, and delivers scholarly, scientific, and educational resources and information in all forms, including digital and electronic, to Smithsonian and affiliated staff and to libraries, researchers, and the general public worldwide. The Libraries also exhibits, studies and interprets its collections, researches and provides factual information in response to queries, and sponsors scholarly and educational activities through public programs and print and electronic technologies.

For 2001, the Smithsonian is not seeking additional funding for programmatic increases for the Smithsonian Institution Libraries. The Institution requires $216,000 for Necessary Pay for existing staff funded in this line item.

PROGRAM - The SI Libraries supports the increase and diffusion of knowledge by building, organizing, managing, housing and preserving collections in all forms, and by providing access to them through reference services, consultation, navigational tools, exhibitions, publications, and scholarly and educational programs. Staff in SIL's eighteen branches in Washington DC, Maryland, New York, Massachusetts, and the Republic of Panama deliver content and research tools to SI staff and, through the Internet, to researchers, educators, and students throughout the Nation and abroad. Through its international exchange program, SIL exchanges Smithsonian publications for those of over 4,000 scientific and learned societies, museums, and educational organizations worldwide.

The Libraries opened its eighteenth branch at the National Museum of American Indian's Cultural Resources Center at Suitland, MD, and began planning for transfer of the Museum's library collection from New York.

Construction should be completed by 2000 on the Natural History Rare Books Library in the National Museum of Natural History, which will provide improved security and environmental controls for the most costly, fragile, and rare items in SIL's collections.

The Smithsonian became a member of the Research Libraries Group (RLG), whose 166 members include most of the largest research and specialized libraries in Western Europe and Australia, as well as archives, historical societies, and museums. RLG programs enable SIL to provide better services to users through resource-sharing arrangements among members and through scholarly databases and other collaborative activities. SIL also works with JSTOR, a nonprofit organization devoted to producing high-quality electronic versions of the backfiles of scholarly journals, and the Scholarly Publishing and Academic Resources Coalition, an alliance of libraries that fosters expanded competition in scholarly communication.

In 1999, the Libraries produced six electronic editions of rare books, originally published from the 16th to19th centuries, in the fields of astronomy, physical science and natural history. To make the editions more useful to researchers and facilitate their use on the Web, staff created new introductions, indexes and other navigational tools.

Collections Management - SIL staff acquire and manage collections of more than 1.2 million volumes that include 7,000 journal subscriptions, nearly 500 electronic journals, 40,000 rare books and manuscripts, 185,000 microforms, and an array of films, sound recordings, photographs, electronic databases, and other materials. The collections support scientific, historical, and cultural research and educational programs and provide context and documentation for the works of art and artifacts contained in the national collections.

Smithsonian staff and the general public locate SIL resources through the Smithsonian Institution Research Information System (SIRIS) on the World Wide Web, and through the Online Computer Library Center, Inc., an international bibliographic database. In 1999, SIL began to implement the Ameritech Library Systems Horizon software as the new foundation for the SIRIS system. The software supports diverse catalogs for the Libraries and the Institution's many archives, as well as for art inventories and research bibliographies.

The Libraries' Imaging Center opened in March 1999. SIL produced 1,718 digitized images of rare books and other items, as part of its target included in the Institution's FY 2000 Performance Plan.

SIL completed a 10-year project to improve documentation of collections by converting all manual bibliographic records to electronic form, upgrading records, and cataloging 35,000 titles in older, unprocessed collections. To improve access to collections, SIL implemented authority control in the database, which allows researchers to find all available materials related to a single author, place, or subject, regardless of changes over time in forms of names or terms. Project staff added over 325,000 authority records to the online library catalog.

Renovations of space and of heating, ventilation, and air conditioning systems in the National Air and Space Museum (NASM) and Anthropology Branch Libraries improved accessibility to the collections as well as environmental and storage conditions. Planning for compact shelving for the SIL Research Annex on North Capitol Street in Washington DC continued.

To enhance collections information, SIL added 2,144 records to the online index of the literature of African arts and culture, bringing that project to a close with over 24,000 new records. The Libraries and the National Museum of African Art began to collaborate on a project to link databases of digitized images of artifacts, photographs, and texts with an African Art Thesaurus to create a coherent collection of electronic materials that can be used from any desktop.

Collection Acquisitions - SIL acquired 39 titles published from the 16th to 19th centuries for its special collections. These included Guido Guidi's *Chirurgia è Graeco in Latinum conversa* (Paris, 1544) and Joseph Lister's *Lancet* articles, published in 1867, which established him as the founder of modern antiseptic surgery. Other subjects included Native American linguistics (including the first novel published in the Mayan language), international expositions, medicine, color theory, mathematics, voyages, and natural history.

Education and Public Programs - With assistance from the National Anthropological Archives and the National Museum of the American Indian, SIL organized a public symposium, *Edward S. Curtis and "The North American Indian" Re-viewed*, complementing SIL's exhibition, *Edward S. Curtis, Frontier Photographer*. The 1999 Dibner Library Lecture featured Charles Brownell on *Horrors! Changing Views of the American Victorian House*. With The Smithsonian Associates, SIL launched a series of lectures featuring authors whose works were based on research done in SIL collections. The first two focused on the Cooper-Hewitt, National Design Museum Branch Library and its collections on the industrial designer Henry

Dreyfus and American painted furniture.

SIL staff organized a website entitled *Anthropology on the Internet for K-12*, which was designated best online resource for anthropology students by the WWW Virtual Library. The Libraries was especially pleased to be included in the new Smithsonian education publication, *Smithsonian Field Trip Guide for Educators*. A new Libraries website, *Library and Archival Exhibitions on the Web*, garnered several best-website notices.

SIL increased access to holdings of the Education Division located in NASM by organizing and cataloging the department's print collections. Records for the collection are now available on the SIL online library catalog.

During FY 1999, SIL reference librarians answered over 55,000 information requests from Smithsonian staff and the general public. The Libraries loaned collections to every state in the U.S. and to 15 countries.

Exhibitions - The Libraries' Exhibition Gallery featured *Make the Dirt Fly! Building the Panama Canal* to mark this engineering feat and the transfer of the Canal from the U.S. to the Republic of Panama. Under development are online versions of several existing and new SIL gallery exhibitions on the laying of the Atlantic cable and *Voyages of Discovery*, which in 2001 will display highlights from SIL collections at the Grolier Club in New York.

NONAPPROPRIATED RESOURCES - General Trust funds help defray costs of providing information services to the Trust-funded units and support exhibitions, publications, public programs, and fund raising. Designated funds from donors support specific projects and programs, such as the SIL/Dibner Library Resident Scholar Program, lectures and publications. Income from endowment supports acquisitions and preservation activities.

SMITHSONIAN INSTITUTION TRAVELING EXHIBITION SERVICE

	APPLICATION OF OPERATING RESOURCES							
	FEDERAL APPROPRIATIONS		GENERAL TRUST		DONOR/SPONSOR DESIGNATED		GOV'T GRANTS & CONTRACTS	
	FTE	$000	FTE	$000	FTE	$000	FTE	$000
FY 1999 ACTUAL	46	2,991	9	738	0	2,141	0	21
FY 2000 ESTIMATE	45	3,047	8	752	0	1,450	0	175
FY 2001 ESTIMATE	45	3,149	8	607	0	1,173	0	0

ABSTRACT - The Smithsonian Institution Traveling Exhibition Service (SITES) sends exhibitions to cities and towns all across America. As a leading Smithsonian outreach operation, SITES offers millions of people beyond Washington DC the chance to experience the Institution's collections and research expertise. For many, it is a once-in-a-lifetime opportunity. Museums, historical societies, science centers, zoos, and aquariums are among the many institutions that host SITES exhibitions. A growing number of libraries, schools, community centers, municipal buildings, shopping malls, and transportation terminals also feature SITES programs, enlivening visitors with a taste of the museums on the National Mall. SITES presents exhibitions and educational programs in every state across the country.

For FY 2001, the Smithsonian is not seeking additional funding for programmatic increases for the Smithsonian Institution Traveling Exhibition Service. The Institution requires $102,000 for Necessary Pay for existing staff funded in this line item.

PROGRAM - SITES exhibitions encompass all of the topics central to Smithsonian collections and scholarship: life and space science, art and the decorative arts, craft, history, anthropology, popular culture, ethnic studies, and the humanities. Many exhibitions replicate large-scale installations on display in Smithsonian museums on the Mall. Others are scaled to accommodate smaller galleries and non-museum settings. SITES introduces new programs constantly with exhibitions that offer fresh ideas, collection resources, and up-to-the minute research findings.

SITES exhibitions in FY 1999 capitalized on community enthusiasm for a local Smithsonian presence. A traveling version of the National Portrait Gallery's blockbuster exhibition, *Red, Hot and Blue: A History of the*

American Musical, toured historic theaters in cities from coast to coast. *Barn Again!*, an exhibition about architectural preservation in farming regions, enlivened rural towns new to Smithsonian outreach. Public libraries were the venues for *Jazz Age in Paris*, an exhibition that SITES circulated in partnership with the American Library Association. And those captivated by the media coverage of the National Air and Space Museum's popular *Star Wars* exhibition took advantage of the show in record numbers with the start-up of SITES' national *Star Wars* tour. From exhibitions about Native American quilting traditions to outdoor installations featuring artist-created garden equipment powered by solar energy, SITES in FY 1999 shared with communities large and small a rich sampling of the Smithsonian's scope and vitality.

The SITES program in FY 2001 will be equally lively. New Exhibitions will roll out on subjects as diverse as women in sports, chocolate, the Burgess Shale, musical instrument makers, American Indian code talkers, botany, Mexican ballads, postage stamp art, and past visions of America's future. These projects, like every exhibition in the SITES program, will be tailored to a wide variety of outreach locations, from the largest mainstream art museum in an urban area to the smallest meeting hall in small-town America.

Exhibition Packages - Although original artifacts form the core of SITES programs, SITES exhibitions do more than showcase artifacts. Many also include interactive computer programs, film and video components, sound stations, educational curricula, and discovery trunks—interpretive tools that stimulate visitor involvement and enrich the learning experience. Every SITES exhibition provides press information, educational materials, installation guides, artifact handling and packing information, insurance coverage, and shipping. Outreach locations that host SITES programs therefore receive not only the stamp of quality inherent in Smithsonian products, but also a complete exhibition package designed to facilitate broad community participation.

Exhibition Itineraries - Host institutions rent SITES exhibitions on a first-come, first-served basis by reserving six-to-eight-week booking slots on pre-established tours. A single SITES itinerary may encompass five years and reach 40 different cities. Or the itinerary may involve only two years and eight outreach destinations, as the rarity and fragility of artifacts warrant. In keeping with the Smithsonian's commitment to reach the largest number and broadest range of public audiences possible, SITES circulates exhibits in every geographic region.

National Reach - SITES outreach extends deep into grassroots America. In communities where cultural resources are scarce, SITES makes a special point of placing exhibitions in high-visibility locations. Rural towns, for example, often host SITES programs created especially for VFW halls and train depots. Theaters, airport terminals, and the renovated multi-use spaces common to historic districts routinely feature SITES exhibitions in smaller cities. In places that depend for tourism and leisure-time activities on park and recreation destinations, SITES provides outdoor installations and nature center kiosk exhibitions. Expanding the range of locations that host SITES programs reaffirms the Smithsonian's role as the Nation's museum.

Partnerships - SITES embraces organizational and business partnerships as a means of strengthening and broadening Smithsonian outreach. For example, *Museum on Main Street*, a collaborative venture between SITES and State Humanities Councils, packages exhibitions and related educational programs for rural communities. Through ongoing partnerships with the American Library Association, SITES maintains a market niche for Smithsonian exhibitions in the public libraries of all fifty states. In conjunction with ARTTRAIN, SITES circulates Smithsonian collections in specially designed gallery cars on board the U.S. rail system.

In FY 2001, SITES, together with the National Aeronautics and Space Administration, will launch *Voyage*, a 600-meter scale model of the solar system tailored to 100 Challenger Centers nationwide. At the same time, a collaboration between SITES and the Lila Wallace Reader's Digest Fund will result in *Enclave*, a major jazz exhibition slated to tour the country by bus. A partnership with the Women's Sports Foundation, the Girl Scouts of the USA, and the YWCA will provide new community venues for public programs and competitions in conjunction with the SITES exhibition *Game Face: What Does a Woman Athlete Look Like?* In circulating *In the Spirit of Martin*, a stirring exhibition of artists' works extolling the life and legacy of Dr. Martin Luther King, SITES is teaming up with the noted fine-arts publishing firm, Verve Editions.

Partnerships combining public and private support enable SITES to reach entirely new people and places. A three-way collaboration between SITES, the Space Telescope Science Institute, and Lockheed Martin on an exhibition entitled *Hubble: New Views of the Universe*, for example, will open the doors to a Smithsonian presence in flight centers and planetariums across the country. A distance learning partnership with Fairfax Network and the Cleveland Education Fund will yield an even greater outreach presence as 5,000,000 students online in 20,000 schools nationwide take advantage of electronic field trips in the SITES program, *America's Jazz*

Heritage. Another 5,000 schools across the U.S. will benefit from a small format version of *Americanos: Latino Life in the United States*, which SITES and Time Warner Inc. are circulating in a full-scale exhibition to mainstream museums. Alliances like these create new opportunities for financial support, public advertising, and program delivery systems that capture audiences far beyond traditional exhibition settings.

NONAPPROPRIATED RESOURCES - General Trust funds provide support to help defray the costs of staff salaries and benefits, fund raising, exhibit design and production, publications, materials, outside specialists, and contractual services. Donor/Sponsor Designated funds provide support for costs related to specific projects and programs.

ADMINISTRATION

	APPLICATION OF OPERATING RESOURCES							
	FEDERAL APPROPRIATIONS		GENERAL TRUST		DONOR/SPONSOR DESIGNATED		GOV'T GRANTS & CONTRACTS	
	FTE	$000	FTE	$000	FTE	$000	FTE	$000
FY 1999 ACTUAL	383	34,000	199	18,539	0	468	0	13
FY 2000 ESTIMATE	381	34,616	258	23,650	0	2,716	0	0
FY 2001 ESTIMATE	381	35,874	216	23,037	0	2,635	0	0

ABSTRACT - Administration includes executive management and related functions provided by the Offices of the Secretary, Under Secretary, and Provost. For FY 2001, the Smithsonian is not seeking additional funding for programmatic increases for Administration. The Institution does, however, request $138,000 for increased Workers' Compensation costs, as well as $1,120,000 for Necessary Pay for existing staff funded in this line item.

PROGRAM - Office of the Secretary - The Office of the Secretary, supported by the Office of the Under Secretary and the Office of the Provost, oversees the Smithsonian Institution and maintains continuous communication with the Board of Regents and its committees. Organizations reporting directly to the Office of the Secretary include the Office of Inspector General, Office of Membership and Development, and Office of Planning, Management and Budget. The Office of Inspector General conducts audits and investigations to prevent and detect fraud, waste, and abuse in Smithsonian programs and operations. The Office of Membership and Development provides both direct fundraising and development support activities in response to Institution-wide and selected museum and research institute development activities. The Office of Planning, Management and Budget coordinates Institution-wide planning, management analysis, budgeting, and policy.

Office of the Provost - The Provost serves as the Smithsonian's chief program officer, providing leadership and integrated oversight for all of the Institution's programmatic activities carried out in the museums, research institutes, central education and other program offices, as well as research support units such as the libraries and archives. The Provost reviews and evaluates the management of the programs in research, exhibitions, collections acquisition and care, and education outreach in the sciences, arts, and humanities; provides operational facilitation to the program units;

and maintains close working relationships with unit directors and their advisory boards.

The Office of the Provost is also responsible for coordination of the Institution's Affiliations Program, the Smithsonian website, the Asian Pacific American program, the Arts and Industries Building exhibition program, and adherence to laws governing accessibility and scientific diving. Office staff coordinate activities in biodiversity, environmental affairs, and marine sciences across the Institution. The Provost also provides oversight to the Smithsonian Center for Latino Initiatives, and a variety of projects designed to increase the awareness of the role and contributions by Latinos to the history and culture of the United States. Also under the Office of the Provost, the Smithsonian Associates Program promotes museum membership and provides educational and cultural programming through the operation of publicly available membership programs, seminars, lectures, travel/study tours and cruises, theatrical performances, and mini-festivals.

Office of the Under Secretary - The Under Secretary serves as the Institution's chief operating officer and is responsible for the day-to-day administration of the Institution. This office oversees the services of a variety of central offices, as well as all administrative, finance, information technology, and facility functions. These essential activities are provided by the following organizations.

- ***Central Services*** - The Office of the General Counsel provides legal advice and services to protect the interests of the Smithsonian. The Office of Government Relations acts as the Institution's primary agent with the Administration, the Congress, and Federal, state, and local entities, by presenting Smithsonian policies and plans, developing and clearing legislative proposals, and coordinating Smithsonian participation at legislative hearings. The Office of Special Events and Conference Services handles the arrangements for special Institutional events and provides expertise to Smithsonian museums and research institutes on issues of domestic and international protocol. Other central services reside with the Office of Public Affairs, Smithsonian Productions, and the Visitor Information and Associates' Reception Center; these offices are included in the Communications and Educational Programs section of the budget.

- ***Administration*** - The Office of Equal Employment and Minority Affairs facilitates the Institution's efforts to achieve equal opportunity in all aspects of the Smithsonian's employment and business relationships, as well as monitoring and evaluating the Institution's progress in

implementing cultural diversity goals. The Office of Human Resources plans and directs a comprehensive program of human resources management for the Smithsonian's diverse employee population. The Ombudsman serves as a neutral party to whom employees can bring work-related problems, concerns, and complaints.

- ***Finance*** – The Chief Financial Officer provides strategic direction and advice for financial management functions and assures that the Institution's fiduciary responsibilities are carried out. The Office of the Comptroller accounts for and reports on the Smithsonian's assets, liabilities, and equities by collecting, authenticating, classifying, and recording financial transactions. The Office of Contracting is the acquisition, contracting, and property management office for the Institution. The Office of the Treasurer is responsible for the growth, safety and integrity of the financial assets of the Smithsonian and assists in identifying and controlling risks.

- ***Information Technology*** - The Office of Information Technology is responsible for the Institution's central computing and telecommunication services, provides an applications development and customer assistance program, and assures the integrity and security of Institutional automated data. The Office of Imaging, Printing, and Photographic Services serves the photographic and imaging needs of museums and research institutes, as well as providing internal printing and duplication services Institution-wide.

- ***Facilities*** - The Office of Facilities Services oversees the Institution's facility function to ensure comprehensive, integrated facilities programs. The Office of Environmental Management and Safety administers environmental management, fire protection and prevention, occupational health, and employee and visitor safety programs. Other facility functions reside with the Office of Physical Plant and Office of Protection Services; these offices are included in the Facilities Services section of the budget.

NONAPPROPRIATED RESOURCES - General Trust funds provide support for salaries and benefits of personnel and other related costs. Donor/Sponsor Designated funds provide support for costs related to programs and projects such as scientific research, fund raising, and public relations. Government grants and contracts provide support for special initiatives, conferences, and seminars.

OFFICE OF PROTECTION SERVICES

	APPLICATION OF OPERATING RESOURCES							
	FEDERAL APPROPRIATIONS		GENERAL TRUST		DONOR/SPONSOR DESIGNATED		GOV'T GRANTS & CONTRACTS	
	FTE	$000	FTE	$000	FTE	$000	FTE	$000
FY 1999 ACTUAL	773	32,248	3	105	0	0	0	0
FY 2000 ESTIMATE	775	33,554	3	146	0	0	0	0
FY 2001 ESTIMATE	775	36,889	3	146	0	0	0	0

ABSTRACT - The Office of Protection Services (OPS) protects and secures the National Collections entrusted to the Smithsonian Institution and ensures the safety and security of staff and visitors, while permitting an appropriate level of public access to collections and properties.

For FY 2001, the Smithsonian requests an increase of $2,000,000 for security system modernization and maintenance. The Institution requires $1,335,000 for Necessary Pay for existing staff funded in this line item.

PROGRAM - The Office of Protection Services provides around-the-clock security for all Smithsonian facilities in the Washington DC area; the Smithsonian Environmental Research Center (SERC) in Edgewater, Maryland; the Cooper-Hewitt, National Design Museum and the National Museum of the American Indian in New York City; and the Smithsonian Tropical Research Institute in Panama. OPS security systems integrate uniformed personnel and electronic monitoring. Staff perform investigation services and escorts to provide a safe and secure operating environment. OPS has developed a security modernization program that better meets security and customer service requirements by providing integrated card access, alarm monitoring and closed-circuit television (CCTV) systems. OPS conducts a comprehensive training program to ensure that employees are prepared for their duties and responsibilities, especially as new electronic systems are installed.

Modernization - In connection with its long-term strategic plan for security system upgrades and modernization, OPS has collaborated with the United States Army Engineering and Support Center, Huntsville (USAESCH) to develop a master plan to support planning, procurement, and integration of electronic security systems at the Smithsonian Institution. The draft master plan was finalized in the fall of 1998. This modernization program

replaces security systems in all Smithsonian Institution buildings, will affect over 12,000 employees and volunteers, and will integrate access-card readers, CCTV cameras, and alarm zones. In FY 1999, with the assistance of USAESCH, the Office of Protection Services evaluated and selected two modern off-the-shelf electronic security management systems, responsive to Smithsonian needs, to replace the 20-year old Smithsonian Institution Proprietary Security System (SIPSS), and to ensure that the Institution was prepared to meet the technological requirements for the year 2000. In coordination with the Smithsonian's Office of Physical Plant, OPS completed design and installation of a new security system for the National Museum of the American Indian Cultural Resources Center in Suitland, Maryland in FY 1999. In addition, OPS completed engineering designs and began system replacement installation for the Smithsonian Institution Building, the Arts and Industries Building, the Hirshhorn Museum and Sculpture Garden, and the National Air and Space Museum. Remaining Smithsonian buildings will have integrated, modern security systems in place before the end of FY 2001.

The Smithsonian performed a number of measures to successfully avoid Y2K problems with SIPSS. By December 1999, the Office of Protection Services ensured that the Smithsonian's security system was fully Y2K ready by replacing SIPSS in South Mall buildings with a new Y2K-compliant system, selectively replacing components for access control systems, and performing technical modifications and work-arounds to ensure that present SIPSS components are Y2K ready.

Training - In FY 1999, the Office of Protection Services built upon and expanded the training program for security officers, supervisors, and administrative staff that OPS initiated the previous year. Over 500 officers completed refresher basic security and safety skills training and 150 security supervisors completed supervisory training. In-house staff delivered courses that included communications, identification of core competencies, basic skills assessments, and standardized operational procedures to 60 new security officers, and 75 administrative staff completed basic skills training in problem-solving, customer service, and communications. Basic security and safety skills, at entry level and updated annually, ensure that OPS security officers meet their legal responsibilities for enforcing secure and safe conduct at Smithsonian Institution facilities. Personal communications skills training addresses the increasing demands on officers and other OPS staff to resolve conflicts and provide customer service to the public. In support of modernization efforts, OPS began technical training for the implementation and operation of the new security systems, conducted training in the operation of magnetometers, and is developing training in the operation of package x-ray machines.

Operations - In late FY 1999, the Office of Protection Services began efforts to develop an automated customer special-event overtime billing system. The new system, which will be ready to implement by the end of FY 2000, is part of an OPS initiative to bring best practices and current technology to bear on all of its operations. In cooperation with Smithsonian Institution efforts to reform personnel, timekeeping, administrative, and other processes, OPS will incorporate information technology into its staffing, scheduling, workload tracking, incident tracking and investigative case management processes as well.

EXPLANATION OF PROGRAM INCREASE – For FY 2001, the Institution requests an increase of $2,000,000 to continue to replace the existing Smithsonian Institution Proprietary Security System (SIPSS), enhance electronic security system operations, and begin maintenance and renewal of the new security systems. The Institution requests that this amount remain available until expended.

The Institution requests $1,350,000 to complete the replacement of SIPSS and continue electronic security system modernization efforts Smithsonian-wide. The replacement system, which will cost $12,000,000 when completed in 2003, will integrate card access, alarm monitoring, and closed-circuit television, which are now common standards in business and government. The funding addresses additional security needs at the Smithsonian not currently performed by SIPSS, but reflecting normal operational security systems standards for facilities like the Smithsonian. This security system modernization program will allow a safe and secure environment while permitting appropriate access to Smithsonian facilities.

The FY 2001 funding will provide engineering support, equipment, training, installation, testing, and documentation at a number of facilities. The proposed plan will follow up on work initiated in FY 1999, which replaced core systems and components affected by Y2K in all Smithsonian facilities. In FY 2000, in partnership with the U.S. Army Corps of Engineers' Electronic Security Center of Expertise in Huntsville, Alabama, the Smithsonian will complete designs and start system installations to replace SIPSS in the National Museum of American History, the National Museum of Natural History, the Museum Support Center, the Quadrangle, the Smithsonian Tropical Research Institute and the Office of Protection Services' Central Control Office. In FY 2001, the Smithsonian will continue system installations and modernization efforts for the National Air and Space Museum, the National Museum of Natural History and the Museum Support Center.

The balance of $650,000 is requested in order to fund on-going maintenance and renewal of the Institution's improved security system. Maintenance of the system will include software upgrades, technical inspections, cleaning, repairs on front-end equipment (computers, switchers, and monitors), field devices, and data-gathering panels. The cost of servicing just the Natural History building—the Institution's largest—has been estimated at $100,000 per year. Renewal costs include replacing installed equipment because of equipment failure, life-cycle termination, changes in technological approach, or additional requirements placed upon the system, such as new exhibits or alarms. Hardware renewal is based on a three-to-five-year life cycle. Wiring renewal is based on a 10–15-year life cycle. Renewal estimates prorate installation costs over the item's entire life cycle, beginning two years after installation. Since the installation program is phased over a four-year time period, the renewal costs are expected to stabilize after four years. In FY 2002 and beyond, maintenance and renewal costs become the primary funding need, but will remain stable at approximately $2,000,000.

As a result of these efforts, the Institution will be able to maintain high standards of electronic security to ensure cost-effective protection of the Nation's treasures, Smithsonian staff members and volunteers, and our millions of visitors each year.

NONAPPROPRIATED RESOURCES - General Trust funds provide partial support for conducting employee background security investigations and the annual National Conference on Cultural Property Protection. For over twenty years, this self-supporting conference has provided an opportunity for the diffusion of knowledge among security, library and administrative professionals throughout museums, libraries, universities and other cultural property institutions. The 1999 conference, co-hosted by the J. Paul Getty Trust in Los Angeles, California, attracted close to 300 participants from around the United States, Canada, and the world. The 2000 conference, with the theme *Challenges and Opportunities: Year 2000 and Beyond*, will be held in Arlington, Virginia.

OFFICE OF PHYSICAL PLANT

	APPLICATION OF OPERATING RESOURCES							
	FEDERAL APPROPRIATIONS		GENERAL TRUST		DONOR/SPONSOR DESIGNATED		GOV'T GRANTS & CONTRACTS	
	FTE	$000	FTE	$000	FTE	$000	FTE	$000
FY 1999 ACTUAL	516	63,234	4	1,709	4	-115	0	0
FY 2000 ESTIMATE	516	71,038	4	3,208	3	198	0	0
FY 2001 ESTIMATE	516	74,465	4	3,146	3	190	0	0

ABSTRACT - The Office of Physical Plant (OPP) creates, preserves, restores, and protects a physical environment that enables the Smithsonian to achieve its goals. OPP creates an environment in which the Smithsonian buildings and grounds are recognized as a benchmark of quality; and provides a functional, pleasing, safe, and accessible environment to maintain the collections. OPP also creates an environment in which visitors experience an appreciation for our heritage, and for the Smithsonian, its buildings, and the collections held as a national treasure.

For FY 2001, the Smithsonian is not seeking additional funding for programmatic increases for the Office of Physical Plant. A net increase of $2,334,000 included in this line item but justified in the Mandatory Increases section, will support increases in the Institution's central utilities, communications, postage, and rental accounts. The Institution also requires $1,093,000 for Necessary Pay for existing staff funded in this line item.

PROGRAM - OPP administers, maintains, repairs, and renovates the Institution's museum and art gallery buildings and associated grounds and gardens. OPP additionally supports many other work and collection storage areas by providing architectural, engineering, and facility planning services. OPP provides trade and craft support, utilities, transportation, mail services, exhibit renovation, and many other related services in support of research, exhibitions, education, and public programs. OPP also provides technical support to several Smithsonian units located outside the Washington DC metropolitan area, including the Smithsonian Tropical Research Institute in Panama; the Smithsonian Astrophysical Observatory in Cambridge, Massachusetts, and its Fred Lawrence Whipple Observatory in Arizona; the Smithsonian Environmental Research Center in Edgewater, Maryland; and the National Museum of the American Indian and the Cooper-Hewitt, National Design Museum in New York City.

Functionality and Accessibility of Buildings - OPP carefully inspects its facilities and analyzes the current condition of its buildings. With this information, the staff determines the remaining service life of building systems and components, and estimates the repair or replacement requirements to keep each building operating at an acceptable level of performance. OPP uses its building assessments to develop, evaluate, and prioritize its five-year plan for restoration and renovation of facilities.

Centralized Facilities Management System - OPP is leading the implementation of an automated facilities management system throughout the Smithsonian. By working collaboratively to develop agreed-upon standards with the facilities management offices that are part of each museum's staff, the Institution is beginning to have a central database of reliable facilities information. This will help management to more accurately develop standardized facilities cost and performance information throughout the Smithsonian. Facilities Center is a consolidated information system that provides reliable and accurate information about every work request and project. OPP will use the information to manage maintenance and assets, including the buildings themselves. Eventually the database will link to facilities drawings that can be shared by anyone using the system.

Research, Outreach, Publications - OPP contributes to the Institution's research, outreach, and publications programs in several significant ways. Two divisions manage collections and have responsibilities in four primary areas:

- Architectural History—maintaining a collection of archival records related to the Institution's architectural history.

- Historic Preservation—preserving the Smithsonian's historic structures, many of which are local and national landmarks, using the architectural history as a base.

- Collections Management—supervising the Garden Furnishings collection and the Castle Collection of antique furnishings and art objects in use throughout many of the public spaces of the Castle and Arts and Industries buildings.

- Archives—maintaining the Archives of American Gardens collection, actively growing through affiliation with the Garden Club of America.

Museum Environments and Exhibitions - OPP maintains the grounds and gardens that surround the Smithsonian museums, which accent the

buildings' exhibitions and enhance the public's experience. The Smithsonian gardens are a peaceful place where staff, visitors and city workers go to rest, learn, and enjoy. OPP staff grow over 200,000 flowering plants every year, and provide holiday decorations and floral and horticultural support for museum programs.

OPP staff is designing and fabricating *The Artistry of Orchids* exhibition, which is scheduled to open in the Arts and Industries Building in January 2000. OPP is also working with the Smithsonian Institution Traveling Exhibition Service to design and fabricate a traveling show featuring its Archives of American Gardens' collection. *American Garden Legacy: Exploring Garden History* will travel to many cities in the United States beginning in May 2001. Also planned is an expansion of the Butterfly Habitat Garden at the National Museum of Natural History (NMNH), a collaboration between horticulturists in OPP and entomologists and exhibit specialists at NMNH. The Garden Club of America has donated $75,000 towards this expansion.

NONAPPROPRIATED RESOURCES - General Trust funds provide support for salaries and benefits of personnel, related support costs, the Trust share of space rental costs for administrative activities, and support services offered to other units by the Office of Physical Plant. Donor/Sponsor Designated funds provide support for costs associated with the upkeep of Smithsonian gardens.

REPAIR, RESTORATION AND ALTERATION OF FACILITIES

	SI	NZP	TOTAL
FY 1999 Appropriation	$40,000,000	$4,400,000	$44,400,000
FY 2000 Appropriation	$41,900,000	$6,000,000	$47,900,000
FY 2001 Estimate	$52,200,000	$10,000,000	$62,200,000

In order to continue improving the conditions of the Institution's buildings, the Smithsonian is requesting $62,200,000 for FY 2001 for repair, restoration, and alteration (RR&A) of facilities. In addition, the Institution is requesting advance appropriations of $17,000,000 to become available on October 1, 2001, and $18,000,000 to become available on October 1, 2002, to complete the renovation of the Patent Office Building (American Art and Portrait Gallery). The FY 2001 estimate for this account includes repair and restoration of all Smithsonian facilities, including the National Zoological Park, as well as alterations and modifications projects.

The Institution is responsible for over 400 buildings which comprise more than 6.6 million square feet of space, and range in age from new to over 150 years old. These buildings, including many visible and valuable structures, provide not only space for the Institution's programs and activities, but also provide safe storage for irreplaceable collections made accessible to millions of scholars and visitors each year. Included are museum and gallery buildings as well as restoration and storage buildings, centers for research and education, and a zoological park.

The FY 2001 RR&A request includes:

Smithsonian locations (excluding Zoo)	$52,200,000
National Zoological Park	10,000,000
TOTAL	**$62,200,000**

Assessment of Facility Conditions - Building systems and components have limited life expectancies. Despite planned preventive maintenance and repair efforts, their heavy and constant use exacerbates the natural aging process of components. As building systems age, the risk of operational failure, unscheduled closings, and damage to collections increases dramatically. In addition, aging systems require increasingly frequent maintenance and repair, which drives up costs. Eventually,

systems reach the breakdown mode of operation. Once a system has reached this stage, it can no longer reliably support activities housed in the building. In the case of museum mechanical systems (heating, ventilation and air conditioning) or roofs, this usually means that the continuous close control of environmental conditions and protection from the elements required to preserve collections cannot be guaranteed. Damage to any of our collections (especially artwork) due to leaks or other environmental failures would seriously threaten our ability to obtain new gifts from donors or loans from other museums. In addition, it costs as much as five times more to achieve this minimally acceptable performance through breakdown maintenance—that is, repairing or replacing system components on an emergency basis when they fail. Resources spent to patch existing systems are essentially wasted when the systems later require full replacement. More importantly, because of the Institution's high public visibility and nearly 35 million annual visits, the potential for irreparable damage to the collections and unplanned system failures is a major concern. When a system has deteriorated to the breakdown point, major renewal or replacement is the only way to regain acceptable performance.

The Institution has carefully inspected its facilities and analyzed the current condition of its buildings. Parameters used to assess existing conditions are watertight enclosure; age and condition of heating, ventilating and air conditioning (HVAC) and electrical systems; and compliance with current codes and industry operating standards. With this information, the staff determines the remaining life of building systems and components and estimates repair or replacement requirements to keep each building operating at an acceptable performance level.

Two of the Smithsonian's major buildings, the National Museum of Natural History and the Patent Office Building, have already reached the breakdown stage, and work has already begun on these projects, as discussed below. Two more buildings, the Arts and Industries Building and the Smithsonian Institution Castle, as well as many buildings at the National Zoological Park's Rock Creek and Front Royal sites, are rapidly approaching this stage. Together, these four buildings and the National Zoological Park properties represent over one-third of the Institution's usable area and contain large amounts of public space.

The most significant deficiencies at these facilities are antiquated and failing mechanical and other utility systems, but a number of modifications are also required to meet life safety and accessibility codes. The Institution plans to invest the majority of its RR&A resources over the next five years in restoring these facilities to an acceptable performance level.

While maintaining an emphasis on restoring these buildings, the Smithsonian's other facilities require constant work to maintain the currently acceptable performance level. Timely attention to deficiencies prevents further deterioration and allows the Institution to take a proactive approach to sustaining the viability of its physical infrastructure.

FY 2001 REQUEST - The Institution requests a funding level of $62,200,000 for FY 2001, which includes $10,000,000 for the National Zoological Park, not including Zoo alterations and modifications projects. Within the total amount, no more than $3,000,000 will be used in FY 2001 for alterations and modifications to facilities to meet programmatic requirements. Funding at the requested level will allow the Institution to make progress toward the timely renewal of some of the most deteriorated buildings, and to make ongoing repairs required to maintain current conditions in newer buildings.

The Smithsonian expects to use the funds requested in FY 2001 to perform work in the categories described below. The chart following this narrative provides a summary of projected expenditures by category of work for FY 2001-FY 2005. The Appendix also contains the detailed five-year summary of projects, as well as status reports on major projects. The Institution contracts for most RR&A projects unless it is more cost-effective to use existing employees or to hire temporary staff to accomplish the work. The National Zoological Park also contracts for certain ongoing maintenance services with funding in the RR&A account. The account also funds expenses required to accomplish the RR&A work, such as security requirements or relocation of staff and collections that might be placed at risk during construction.

Major Capital Renewal - This category includes the cyclical replacement of major building systems and equipment and major renovation required to ensure long-term preservation of the buildings. Projects in this category differ in magnitude, expense, and planning complexity from routine ongoing restoration work, repair projects, or replacements undertaken when a piece of equipment fails. Work in this category primarily addresses the major replacement requirements for HVAC and electrical systems at the Institution's older facilities where these and other critical building systems are nearing the end of their useful service lives. The National Museum of Natural History, Patent Office Building, Arts and Industries, and Smithsonian Institution Castle buildings are all now in need of major capital renewal.

Projects in this category involve complete replacement of HVAC, electrical, and plumbing systems, and restoration or replacement of exterior

components such as facade, roof, and windows to ensure long-term operation and preservation of the building. Modifications to the building also improve energy efficiency, meet fire detection and suppression requirements, and correct hazardous conditions. By combining these kinds of tasks into a single project, the Institution saves money and avoids repeated disruption to activities in the building. The Smithsonian achieves operating efficiencies as well by designing new building systems and components to work together. For example, by installing multiple-paned windows and increasing insulation, the Smithsonian can select more energy-efficient heating and cooling equipment. The equipment costs less to purchase and install, and long-term operating costs are lower. The impact of renovation work on programmatic activities is a key factor in planning a major project. Work of this magnitude causes serious disruption to activities in the building. The Institution must relocate staff and collections from the areas under construction to prevent damage, allow staff to continue working during the construction period, and ensure safety and, when possible, continued public access. Major capital renewal projects are phased over a number of years to achieve the most efficient balance of cost savings while minimizing disruptions to public programs and staff activities.

The current condition and planned renewal of facilities is summarized below.

- ***National Museum of Natural History ($10,655,000)*** - Based on a master implementation plan completed in 1987, the Institution has begun a comprehensive renovation program in the National Museum of Natural History building, which will replace the HVAC equipment, ductwork, electrical equipment and wiring, piping systems, and the roof and windows of the main building. Asbestos and lead will be abated or encapsulated; the fire protection, storm water, communication, alarm, and emergency power systems will be upgraded; storm water systems and a hazardous chemical control facility will be installed; and the Museum's main entrance on the Mall will be made accessible to persons with disabilities.

  Progress to date includes expending $49,400,000 to complete 38 percent of the required renovation, primarily exterior work, including replacement of the central cooling plant and emergency generator, asbestos abatement in the attics and mechanical spaces, construction of new rooftop mechanical rooms, replacement of the windows in the wings, some elevator and communications upgrades, rotunda restoration, and interior renovation of about one-third of the space in the east wing. An estimated $80,000,000 in additional funds will be

required to continue this incremental renewal program, primarily for interior systems, over the next ten years.

- ***Patent Office Building ($17,000,000)*** - In FY 2001, the Smithsonian will continue the renewal program in the Patent Office building that will replace the HVAC, electrical, plumbing, and other utility systems, as well as upgrade fire protection and communications systems, replace the windows, restore the elevators, abate hazardous materials, and create accessible entrances and restrooms. The roof is currently being replaced with previously appropriated funds. The Institution is designing a comprehensive renovation of the building, at a total estimated cost in the range of $110,000,000 - $120,000,000. The $60,000,000 included in the five-year RR&A program is for system renewal, and safety and accessibility modifications to the building. Improving the building's functionality, enhancing space for public programs and education, and preserving the historical integrity of this landmark building are additional costs. The Institution plans to begin the work in the spring of 2000 and complete it in about three years.

- ***Arts and Industries Building ($2,000,000)*** - Originally designed to house the rapidly growing National Museum, the Arts and Industries Building was started in April 1879 and completed in March 1881. The last major renovation of the HVAC system took place in the 1970s. The HVAC equipment, electrical and other utility systems are now nearly 30 years old, and break down with increasing frequency.

  The Institution plans to replace the mechanical, electrical, plumbing, fire protection, elevator, and communications systems in the building, make modifications to ensure compliance with the Americans with Disabilities Act (ADA), abate or encapsulate asbestos and lead paint, and restore the interior to reflect its original architecture. The Smithsonian is currently designing the project, and the amount of $2,000,000 in the FY 2001 request will complete design of the renewal project.

- ***National Zoological Park***

  Rock Creek ($3,525,000) - A number of buildings at Rock Creek are currently below the acceptable performance level. As major components of the building systems age, the risk of operational failure, unscheduled closings, and danger to the animal collections and research efforts increases dramatically. Among the buildings with serious deficiencies, including structural deficiencies, failing HVAC systems, obsolete or inadequate electrical systems and leaking roofs or siding are the Australia Building, the Bear Exhibit, the Mane Building, the Elephant

House, the Property Yard and Valley Keeper areas, and the Holt House. Several other buildings barely meet a minimum acceptable performance level, including the Reptile Building, Deer and Tapir Building, and Seal/Sea Lion Exhibits. In addition to outdated utility systems and failing exterior structures of individual buildings, basic infrastructure deficiencies include antiquated and inadequate central utility service capacities and distribution systems, obsolete fire alarm and smoke detection systems, practically nonexistent central monitoring of animal life support systems (such as water treatment and climate control), and deteriorated roadways and bridges.

The National Zoo will use the FY 2001 funding to begin renewal of the buildings with the most serious deficiencies, and to design bridge and road repairs at the Rock Creek property.

Front Royal ($1,100,000) - The Smithsonian acquired the 3,150-acre Front Royal property from the U.S. Army in 1974 to house the National Zoological Park's Conservation Research Center. The first buildings date from 1910-12, with the majority constructed in the 1930s. The Smithsonian renovated some of the buildings and added a veterinary hospital in the 1970s. Today, the property has more than 89 buildings ranging from animal shelters to research laboratories and residences, totaling about 250,000 square feet of space. The site is served by two and one-half miles of roads and 20 miles of jeep trails, and is secured by 30 miles of fencing.

The Institution recently completed a comprehensive evaluation of the condition of the buildings and infrastructure components at Front Royal and the staff is developing a long-range plan to correct deficiencies. Of immediate concern, however, is replacement of several badly deteriorated maintenance buildings with a single consolidated facility. Several of the buildings that house maintenance shops and equipment—in actuality not much more than sheds scattered around the property—are in such poor condition that they are no longer safe for use. The Smithsonian will use the FY 2001 funding to begin design and replacement of the maintenance buildings with a consolidated facility that will allow maintenance activities to be conducted in a safe environment.

Code Compliance and Security - This category includes projects included in the Fire Detection and Suppression, and the Access, Safety and Security categories. The majority of this work, as well as the work in the next section, is accomplished by contract, with a small amount of work accomplished by existing employees or temporary staff when appropriate

and cost-effective. The amounts indicated represent current planning estimates for each subcategory.

- ***Fire Detection and Suppression ($725,000)*** - Smithsonian staff have developed a fire protection master plan for every major Smithsonian facility. Projects typically include installation of detection systems such as smoke alarms, suppression systems such as sprinklers, and architectural modifications to create fire zones by installation of firewalls and doors.

- ***Access, Safety, and Security ($4,458,000)*** - These projects provide better access to the Institution's facilities for persons with disabilities, improve environmental conditions in buildings, and correct facility conditions that threaten the security of the National Collections. Work includes projects such as asbestos abatement and correction of ventilation problems; modifications to ensure accessibility of public facilities, eliminating obstructions and overhead hazards, improving emergency warning systems, and providing seating space for wheelchair users and listening systems for the hearing impaired; and projects to improve the security of the collections, staff and visitors, such as installing security surveillance systems, improving exterior lighting, and installing card access systems to limit and document entry to certain spaces.

Infrastructure Repairs and Modifications - This category includes projects in the General Repair, Facade, Roof and Terrace Repair, Utility Systems Repair, and Repair and Restoration Planning, Design, and Inspection categories. This category also includes Alterations and Modifications (A&M) projects. The amounts indicated represent current planning estimates for each category.

- ***General Repair ($7,767,000)*** - These projects include minor, unscheduled, but essential, repairs that the Institution cannot anticipate specifically. Estimates of requirements are usually based upon historical data on the volume of work needed each year.

- ***Facade, Roof, and Terrace Repair ($3,940,000)*** - This work includes a variety of projects accomplished cyclically according to the life of the materials used. For example, most kinds of roofs need replacing nearly every 20 years, facade joints need recaulking and repainting about every 10 years, and window frames and other exterior trim need repainting every five years. Smithsonian buildings require continuing facade work in order to restore and maintain intact the building envelopes.

- ***Utility Systems Repair ($6,080,000)*** - These projects maintain, repair, and upgrade the HVAC, plumbing, electrical, and communications systems throughout the Institution's facilities. Ongoing renovations, repairs, and replacement of deteriorated equipment components are essential for ensuring reliable and energy-efficient operation of utility systems. The long-term preservation of the National Collections depends upon stable temperature and humidity conditions.

- ***Repair and Restoration Planning, Design, and Inspection ($2,000,000)*** - The Smithsonian uses funds to identify and analyze long-range repair and restoration needs and to design future-year projects in advance of funding requests. In addition to improving the accuracy of cost estimates, design of projects in advance of funding reduces escalation costs by enabling the staff to award construction contracts as soon as resources are appropriated. Needed repairs are also accomplished much sooner, thus preventing further deterioration and ensuring faster compliance with codes.

- ***Alterations and Modifications (A&M) ($2,950,000)*** - The Institution must make changes, improvements or minor additions to existing space and plan for future requirements in order to maintain the vitality and operating effectiveness of its programmatic activities. Funding in A&M allows staff to contract for space planning and feasibility studies to ensure the best programmatic use of space as needs change, for design and construction of specific building modifications and minor additions, and for equipping of changed space. Individual projects will cost no more than $1,000,000 and will have little or no impact on facility operating costs.

Repair, Restoration, and Alteration of Facilities
(Includes National Zoological Park)
FY 2000–FY 2005

(Dollars in millions)

CATEGORY TITLE	FY 2000 Received	FY 2001 Request	FUTURE REQUIREMENTS				
	Federal	Federal	FY 2002	FY 2003	FY 2004	FY 2005	Estimated Outyear Costs
Major Capital Renewal							
National Museum of Natural History	10.3	10.7	6.6	8.5	8.8	13.8	32.0
Patent Office Building	8.0	17.0	17.0	18.0	0.0	0.0	0.0
Arts and Industries Building	4.5	2.0	9.6	11.0	17.5	16.7	3.0
Smithsonian Castle	.5	0.0	0.0	2.0	2.0	0.0	31-46
National Air and Space Museum	0.0	0.0	0.0	0.0	0.5	0.0	44.0
Renwick Gallery	0.0	0.0	0.3	0.0	0.0	0.0	12-15
National Zoological Park	0.9	4.6	4.2	2.8	2.9	3.0	63-75
SUBTOTAL	24.2	34.3	37.7	42.3	31.7	33.5	185-215
Code Compliance and Security							
Fire Detection and Suppression	0.8	0.7	0.7	1.2	1.0	2.2	
Access, Safety and Security	4.0	4.4	5.6	2.6	6.0	5.7	
SUBTOTAL	4.8	5.1	6.3	3.8	7.0	7.9	ONGOING
Infrastructure Repairs and Modifications							
General Repairs	6.8	7.8	8.0	6.7	8.9	7.5	
Façade, Roof and Terrace Repair	1.9	3.9	1.3	1.0	5.4	3.9	
Utility System Repair	5.2	6.1	4.7	4.2	5.0	5.2	
R&R Planning, Design and Inspection	2.0	2.0	2.0	2.0	2.0	2.0	
Alterations and Modifications	3.0	3.0	5.0	6.0	6.0	6.0	
SUBTOTAL	18.9	22.8	21.0	19.9	27.3	24.6	ONGOING
GRAND TOTAL	47.9	62.2	65.0	66.0	66.0	66.0	ONGOING

CONSTRUCTION

	SI	NZP	TOTAL
FY 1999 Appropriation	$16,000,000	$ 0	$16,000,000
FY 2000 Appropriation	$19,000,000	$ 0	$19,000,000
FY 2001 Estimate	$3,000,000	$1,000,000	$4,000,000

Plans for facility development represent a major investment in the continuing vitality of all Smithsonian programs, whether they are for collections management, research, public exhibitions, or education, as well as its many support services. The Institution requests $4,000,000 in FY 2001 to carry out these plans. In addition, the Institution is requesting an advance appropriation of $2,500,000 for the Hilo base building to become available on October 1, 2001. The five-year construction program is summarized on the chart following this narrative.

The construction program for FY 2001 includes:

National Zoological Park Water Exhibit	$1,000,000
Smithsonian Astrophysical Observatory-Hilo Base Building, Phase I	2,000,000
Smithsonian Environmental Research Center Infrastructure	1,000,000
TOTAL	**$4,000,000**

National Zoological Park Water Exhibit ($1,000,000) - Water is the cradle of life and a crucial resource for life's maintenance. This exhibit explores the wonder of water in its many forms, how it shapes life on earth and sculpts the earth, the adaptations needed to live in water, water quality issues, and how we use water. In addition to renovating a previously closed area, this exhibit brings to life the world of water while introducing visitors to a theme which will be integrated throughout the Zoo in the future.

Renovation of the three-acre area to create the new exhibit is expected to cost $3,900,000. A total of $2,400,000 was appropriated between FY 1993 and FY 1995, and the National Zoological Park expects to raise $500,000 for this exhibit. Planning and conceptual design is complete and the Institution plans to begin site work in FY 2000. This work

will include the restoration of the pond area, construction of a valley trail, preparations of the wetland area, and preparations for plantings. The Institution requests $1,000,000 in FY 2001 to complete construction of the exhibit. The Water Exhibit will open to the public in late FY 2001.

Smithsonian Astrophysical Observatory-Hilo Base Building, Phase I ($2,000,000) - The SAO's Submillimeter Array (SMA) is a major initiative by the Smithsonian to place an array of telescopes on Mauna Kea in Hawaii. The SMA will consist of eight antennas whose signals are combined to produce very finely detailed images. The resolution of the array will be 50 times finer than that achieved by telescopes currently making observations at these wavelengths. Because of its pioneering character, the array is expected to produce fundamentally new insights into many processes involved in the formation and evolution of stars, planets and galaxies.

The project, begun in 1990, is very far advanced. Essentially all of the equipment has been designed and prototyped at SAO's facilities in Massachusetts. Since January 1999, the project has been in the process of relocation to Hawaii. By July 1999 the first antenna of the array was operational on the summit of Mauna Kea. A team is present in Hawaii to carry out the installation process. Staff in Hawaii now totals 12, and will increase to about 35 during the critical checkout period of the entire array during 2000-2003. The operation of the instrument will be complex and will require the support of many scientists, engineers and technicians on a daily basis. The techniques required to successfully merge the eight antennas into a single astronomical instrument are at the cutting edge of technology and require intense human resources of the highest caliber. After assembly of the array, it will be maintained and operated by a permanent staff of about 25 living on the island of Hawaii.

Currently, base operations consist of 3,600 square feet of rented space at sea level in Hilo. For specific requirements involving vacuum technology and cryogens, SAO borrows space, which will have to be relinquished by FY 2001, from the National Astronomy Observatory of Japan. Because of the difficulty of working at 14,000 feet—for both mental and physical activities—it is essential to have a base facility near sea level. The six other observatories on Mauna Kea have such facilities.

SAO had originally planned to lease space to meet the base facility requirements in a building to be developed by the General Services Administration (GSA) in Science Park of the University of Hawaii at Hilo. The GSA project was canceled, however, and SAO has had to consider other alternatives. The current arrangement of sharing space with another organization is no longer an option. The base facilities of the other

observatories are already overcrowded. While one of these organizations has provided space temporarily, it is already pressuring SAO to move out in order to make room for its own staff. In addition, the equipment set-up required to operate and monitor these optical observatories differs substantially from what SAO needs for submillimeter observations, and commercial space is both expensive and poorly suited to support high-tech laboratories. The only viable option is construction of an SAO facility. It is crucial to the success of the project that the construction of a base facility begin as soon as possible.

Repairs, operations, development, and much of the scientific data analysis will be done from the sea-level base facility with only a small crew traveling to the instrument on any given day. A recent re-evaluation of space concluded that additional square footage is required for staff and laboratory operations. This consequently increased the square footage and cost estimate for construction over previous estimates. A partnership with the Academia Sinica's Institute of Astronomy and Astrophysics (ASIAA) will provide the funding for the design of the facility in FY 2000; the Federal portion of funding for construction totals $4,500,000.

The Institution requests $2,000,000 in FY 2001 for Phase I of the project to conduct site work and to begin construction of the base facility at Hilo. In addition, the Institution is requesting an advance appropriation of $2,500,000 to become available on October 1, 2001, to complete construction. The facility will include about 16,000 square feet of electronics laboratories, offices, and support space. The building will be constructed in Science Park, near the base operations facilities of other telescopes on the Mauna Kea summit. This location provides excellent access to the summit roads, to the communications hub, and to a larger scientific community with which to exchange ideas. The Smithsonian expects to have extremely important cooperative observing programs with two other telescopes with base facilities at the site, and this arrangement will help attract qualified personnel to what would otherwise be a remote and isolated work site.

Smithsonian Environmental Research Center Infrastructure ($1,000,000) - The Smithsonian Environmental Research Center (SERC) is the Institution's major center for ecological research and environmental education. SERC conducts long-term interdisciplinary studies on aquatic, terrestrial and atmospheric systems. One major research program at SERC quantifies the effects of atmospheric deposition and land use on ground water, streams, and estuaries. Another major program addresses the complexities of landscapes and the biological consequences of natural and human disturbances. Yet another focuses on the control and integration of population, communities, and ecosystems at the estuarine boundary

between the land and the sea. SERC is a major resource of knowledge and expertise to many constituencies, including schools, governments, research institutions, and the general public.

Research and public programs at SERC are providing to scientists and legislators the information needed to make decisions on the profound environmental issues of the day. Federal appropriations and grants, as well as other public and private sources, support this research. Efficient facility infrastructure is required to support the research program and to serve as an example of environmental stewardship to corporate, private and governmental entities.

SERC's infrastructure includes roads, bridges, parking areas, sidewalks, piers, heating and cooling systems, water supply and treatment systems, sewage handling and treatment systems, storm water management, electric power, communications networks, fire protection and security systems. Over the past 20 years, the infrastructure at SERC has not kept pace with program growth, and systems are operating beyond their intended capacities. The key component of the infrastructure improvement project is consolidation of heating and cooling systems into a central utility plant. This plant will replace aging and inadequate systems now in individual buildings with an energy efficient system that will service existing core facilities and provide some capacity for future expansion on the site. Other critically needed improvements include increasing water and electrical service capacity, storm water management, and modifications to the public access road. For FY 2001, the Institution requests $1,000,000 to design and begin construction of the necessary infrastructure improvements, which are an approved part of SERC's Master Plan. Additional funding of $3,500,000 will be requested to complete the project in future fiscal years.

Long Range Construction Program
(Includes National Zoological Park)
FY 2000 - FY 2005

(Dollars in Millions)

ESTIMATED COSTS		PRIOR FUNDING Federal	OUTSIDE FUNDING Non-Fed	FY 2000 REQUEST Federal	FY 2001 REQUEST Federal	FUTURE REQUIREMENTS FY 2002	FY 2003	FY 2004	FY 2005	Outyear Costs
National Museum of the American Indian Mall Museum										
Plan/Design:	20.4	17.1	3.3							
Construction:	111.6	37.2	61.4	13.0						
Equipment:	10.0		4.0	6.0						
1/	142.0	54.3	68.7	19.0						
National Zoological Park Water Exhibit										
Plan/Design:	1.1	1.1								
Construction:	2.8	1.3	0.5		1.0					
Equipment:	0.0									
	3.9	2.4	0.5		1.0					
Smithsonian Astrophysical Observatory Hilo Base Building - Phase I										
Plan/Design:	0.5		0.5		0.0					
Construction:	4.3				2.0	2.3				
Equipment:	0.2				0.0	0.2				
	5.0		0.5		2.0	2.5				
Smithsonian Environmental Research Center Infrastructure										
Plan/Design:	0.7				0.7					
Construction:	3.8				0.3	1.5	2.0			
Equipment:	0.0									
	4.5				1.0	1.5	2.0			
SUMMARY										
Plan/Design:		18.2	3.8	0.0	0.7	0.0				
Construction:		38.5	61.9	13.0	3.3	3.8	2.0			
Equipment:		0.0	4.0	6.0	0.0	0.2				
TOTAL		56.7	69.7	19.0	4.0	4.0	2.0			

1/ Reflects increased cost estimate; see Appendix for more information.

Smithsonian Institution

Board of Regents

Under Separate Boards of Trustees
John F. Kennedy Center for the Performing Arts
National Gallery of Art
Woodrow Wilson International Center for Scholars

BOARD OF DIRECTORS
Smithsonian Business Ventures

Smithsonian Magazine
Smithsonian Retail
–Shops
--Concessions
Catalog
Product Licensing
Marketing Database
Entertainment Initiatives

The Secretary

Secretariat

Inspector General

Planning, Management and Budget

Membership and Development

The Under Secretary

The Provost

Operations Directorate

ADMINISTRATION
Equal Employment and Minority Affairs
Human Resources
Ombudsman

FACILITIES
Environmental Management and Safety
Physical Plant
Protection Services

FINANCE
Comptroller
Contracting
Treasurer

INFORMATION TECHNOLOGY
Imaging, Printing, and Photographic Services
Information Technology

General Counsel

Government Relations

Communications
– Public Affairs
– Visitor Information and Associates' Reception Center

Smithsonian Productions

Special Events and Conference Services

Museums and Research Institutes

Anacostia Museum/Center for African American History and Culture
Archives of American Art
Arthur M. Sackler Gallery/Freer Gallery of Art
Center for Folklife and Cultural Heritage
Cooper-Hewitt, National Design Museum
Hirshhorn Museum and Sculpture Garden
National Air and Space Museum
National Museum of African Art
National Museum of American Art
– Renwick Gallery
National Museum of American History
National Museum of the American Indian
National Museum of Natural History
– Museum Support Center
National Portrait Gallery
National Postal Museum
National Zoological Park
Smithsonian Astrophysical Observatory
Smithsonian Center for Latino Initiatives
Smithsonian Center for Materials Research and Education
Smithsonian Environmental Research Center
Smithsonian Tropical Research Institute

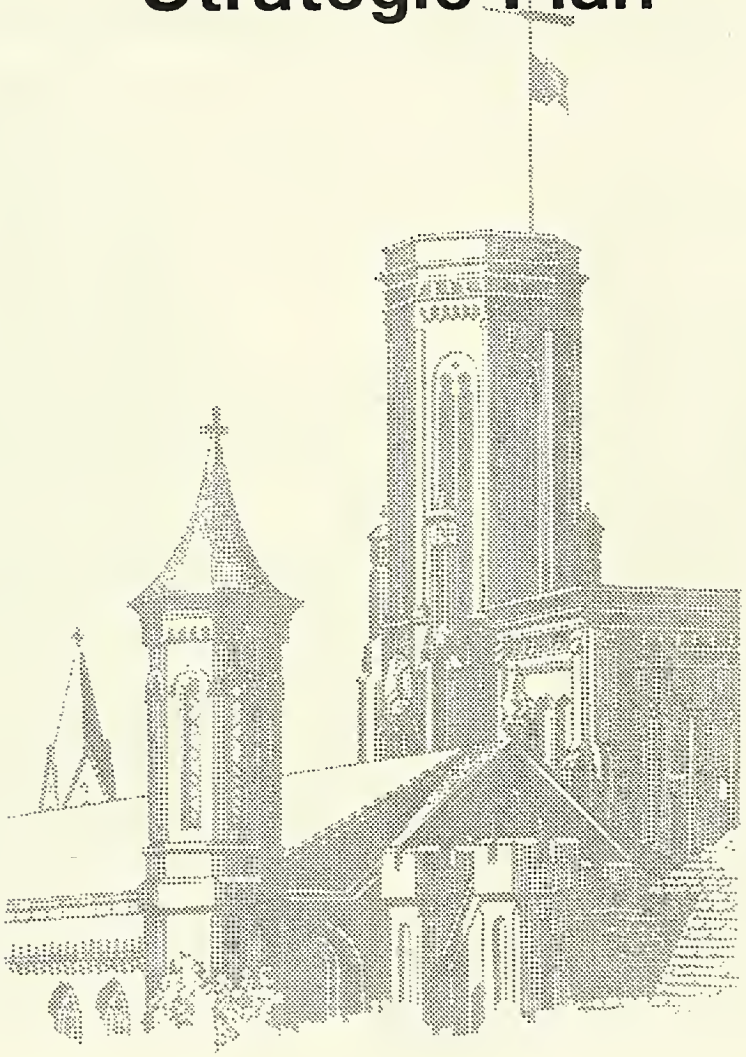
Education, Museum, and Scholarly Services

Exhibits Central
Fellowships and Grants
International Relations
National Science Resources Center
Program for Asian Pacific American Studies
Smithsonian Institution Archives
Smithsonian Institution Libraries
Smithsonian Institution Press
Smithsonian Institution Traveling Exhibition Service
Smithsonian Center for Education and Museum Studies
Sponsored Projects
The Smithsonian Associates

Other support services:
Accessibility Program
Institutional Studies
Scientific Diving Program

January 19, 2000

Smithsonian Institution Strategic Plan



...to the United States of America, to found at Washington, under the name of the Smithsonian Institution, an Establishment for the increase and diffusion of knowledge...

September 1997

MISSION

The mission of the Smithsonian Institution is the increase and diffusion of knowledge.

GOALS

- Increase knowledge through research activities and use of the Smithsonian collections.
- Diffuse knowledge through exhibitions, publications, progams, electronic communications, and affiliations; and through improvements in educations and museum training opportunities.
- Support increased knowledge and diffusion through improvements in finance, management, and physical infrastructure of the Institution.

MISSION STATEMENT

The mission of the Smithsonian Institution has remained the same for the 150 years of its existence: the increase and diffusion of knowledge. These words are taken from the last will and testament of James Smithson, the English benefactor and man of science who had never set foot in the United States, yet who bequeathed his whole estate

> ...to the United States of America, to found at Washington, under the name of the Smithsonian Institution, an Establishment for the increase and diffusion of knowledge...

Written in 1826, these words are the only guidance James Smithson offered to the Institution that bears his name today. Three years later, he died, and six years after that, his nephew died without heirs. Smithson's estate then passed on to the United States which, under the Act of July 1, 1836, accepted the gift. In 1838, eleven boxes of gold sovereigns, valued at $508,319.46, were deposited with the United States Mint in Philadelphia.

Following eight years of debate in the Congress, the Organic Act of 1846 (20 U.S.C. 41 et seq.) was enacted on August 10, 1846. Under its terms, Congress established the Institution in its present form and provided for the administration of the trust, independent of the Government itself, by a Board of Regents and Secretary, to whom are assigned broad discretion to determine the most appropriate

To carry out its mission of increasing and diffusing knowledge, the Institution:

- ***performs fundamental research***
- ***publishes the results of studies, explorations, and investigations***
- ***preserves for study and reference more than 140 million items of scientific, cultural, and historical interest***
- ***maintains exhibits representative of the arts, history, technology, aeronautics and space exploration, and natural history***
- ***participates in the international exchange of learned publications and scholars***
- ***engages in programs of education and national and international cooperative research and training***

means of increasing and diffusing knowledge. During the long debate preceding the Act, different groups had proposed various functions for the Smithsonian, including a national university, normal school, school for the blind, national library, and a national museum of the arts and sciences. Some proponents focused on the increase of knowledge and some on its diffusion, while others emphasized that the trust was not intended to benefit the United States only, but the world at large. Although the university and school functions were abandoned, the Act of 1846 did provide for most of the other proposals:

> ...the Board of Regents...shall cause to be erected a suitable building...with suitable rooms and halls for the reception and arrangement...of objects of natural history, including a geological and mineralogical cabinet; also a chemical laboratory, a library, a gallery of art, and the necessary lecture rooms...

In summary, James Smithson, in bequeathing the whole of his property "for the increase and diffusion of knowledge," created a charitable trust with the United States as trustee for purposes not limited to the national interest, but for the benefit of all mankind. In the Act of July 1, 1836, Congress accepted the Smithson trust with its commitment to the trust, Congress has, from the start, supplemented trust resources with appropriated funds and property.

This unique combination of a privately endowed Institution, administered by a Board of Regents independent of the Government, and the continuing support of the United States as trustee, in generous fulfillment of its pledge, has made possible the achievements of the Smithsonian. Contributions from private donors, inconceivable in 1836, have created the great national collections, and continuing additions to the Smithsonian's trust funds have maintained the Institution's central resource for initiative and integrity. For its part, the Congress has responded

The Organic Act of 1846, Section 3, provided:

That the business of the said Institution shall be conducted at the city of Washington by a board of regents...to be composed of the Vice-President of the United States, the Chief Justice of the United States...; three members of the Senate, and three members of the House of Representatives; together with six other persons, other than members of Congress...

James Smithson
(1765-1829)

with the very substantial Federal support that has been essential to the growth of the Institution and to its far-reaching services to the public for more than a century and a half.

As noted previously, the Organic Act established the Board of Regents. Subsequent legislation amended the composition of the Board by increasing the number of citizen members from six to nine. In this century, the Regents have sought specific legislative authority for some activities that further the trust, most particularly those requiring the appropriation of large sums of Federal money. However, neither those statutes nor the ensuing appropriations have altered the powers of the Regents or their independent authority.

Across the years, advisory groups have been formed to address specific needs identified by the Regents. For example, based on growing evidence of the need for increased cooperation with entities outside the Institution, the Smithsonian Council was established in 1966. As planned, the Council, consisting of not more than 25 members, meets to advise on matters affecting the progress of science and learning within the Institution. Council members are appointed on the basis of distinguished attainments in scholarship, research, and understanding, and are drawn principally from those active in the learned professions. The National Board was established in 1971 as another advisory board for Smithsonian management. It consists of 50 members from across the country who assist with Institutional advancement and outreach, and provide expertise on business and operational matters. In addition to these two pan-Institutional bodies, many Smithsonian units also have advisory boards and commissions. A complete list of these boards and an organization chart accompany this document.

The Board of Regents:

- *bears the responsibility of the United States as trustee for carrying out Mr. Smithson's bequest and the public trust for which it provided;*
- *benefits from representation from all three branches of Government, yet the Institution is not part of any branch of Government; and*
- *sets Institution policy and oversees the management of the Smithsonian assets: the collections, the buildings of the Institution, and the funds available to it.*

KEY EXTERNAL FACTORS

In September 1993, the Institution's Board of Regents commissioned a group of citizens to ponder the future of the Institution. The Commission on the Future of the Smithsonian was charged with "...an examination of the Smithsonian, its mandate and its roles, and an examination of the cultural, societal, and technological factors that influence its capacity to act." The Commission issued its report in 1995. As part of its efforts, the Commission reviewed the setting of the Smithsonian, that is, the environment in which the Institution operates, and also addressed what changes the Institution might face in the future. The following summary of the Commission's findings represents the key external factors that the Institution must consider in developing and implementing goals and objectives that will enable it to fulfill its mission.

From the time of James Smithson's bequest, there have been enormous changes in the nation, beginning with the growth in population. Worldwide movement of people has brought ever greater ethnic and racial diversity to this country. Increased diversity and greater participation in public life by various segments of the population have resulted in more vigorous debates about values. For an educational institution like the Smithsonian, such elements enrich the cultural environment and offer new opportunities. Interactions between nations and their peoples have also changed dramatically, to a large extent as a result of technology.

Changes since the mid-1800s:

- ❒ **Scientific advances have vastly expanded the world of knowledge in the Institution's domain.**
- ❒ **The natural environment is under extreme pressure.**
- ❒ **Technology has permanently altered the nation and the world.**
- ❒ **Concomitant with technological changes and interacting with them have been enormous social and political changes.**
- ❒ **More of the nation's people are educated through high school and college.**

Just as the nation today is vastly different from the way it was in 1846, so it will continue to change in the decades to come, with the pace of change accelerating. The population is aging. The proportion of the population who are members of racial or ethnic minority groups will increase in the decades ahead. As recently as 1990, these groups represented one in five Americans. According to Census Bureau projections, by 2050 about half the population will have origins in these groups.

Popular sensibilities and interests continue to evolve. Scientific understanding is deepening, and the enhanced ability to communicate speeds the awareness of these and other changes. The Institution's principal future challenge is to reflect a rapidly changing society, to change itself, and to be a contributor to the richness of that society while being the treasury of the past.

Flexibility in programs, outlook, finance, administration and governance will be one requirement for dealing with changing challenges and opportunities. New, alternative ways to expand the reach of the Institution and reflect new developments can be exploited.

"This Institution has for many years played a vital part in Americans' sense of their nationhood. As the United States becomes an even richer composite of cultures and peoples, the Smithsonian's role as a national meeting place will become even greater, representing the satisfying possibilities of our diverse society."

I. Michael Heyman,
Secretary
1994-1999

GOALS AND OBJECTIVES

The following goals and related objectives collectively represent the priorities of the Smithsonian Institution, and will set the framework for program activities and resource allocations during the next five-year period. While the goals and objectives are numbered and presented in a certain order, this presentation does not represent an order of priority among them. Indeed, many of the goals and objectives presented here are inter-related in ways that would not permit one to be achieved without impacting on or drawing from one or more of the others. Most importantly, it must be noted that achievement of these goals and objectives is largely dependent on the level of resources available to the Institution during the planning period.

Included with each goal and objective is a set of strategies for meeting them, and a list of possible areas of measurement to be used in determining if the objectives and goals have been met. An annual performance plan for each year, beginning in fiscal year 1999, will include the specific goals, strategies and measures that the Institution will use to measure its progress toward meeting its strategic goals.

GOAL I
Increase Knowledge Through Research Activities and Use of the Smithsonian Collections

OBJECTIVE ❶

Support research based on collections, other research areas of excellence within the Institution, and long-term global projects.

STRATEGIES

- ❑ Continue to foster the identification and reward of excellence in research.
- ❑ Determine areas of the collections that could become the focus for research at the Institution.
- ❑ Facilitate linkages among researchers across disciplines, and with other research institutions worldwide, including increased support for fellowships.

AREAS OF MEASUREMENT

- ❑ Independent assessments of research programs as to their productivity, quality and relevance.
- ❑ Continued use of peer review and other evaluation methodologies.
- ❑ Increased support of fellowships.
- ❑ Continued dissemination of research findings through publications, electronic technology, and other means.
- ❑ Productivity of relationships between researchers across disciplines and in different research areas.

OBJECTIVE ❷

Provide for management of the Smithsonian collections as central resources for research, public access, and the bases for other program activities.

STRATEGIES

- ❑ Continue to refine policies for future acquisitions of collections.
- ❑ Keep policies current for management of collections, including access, storage, location and conservation.
- ❑ Continue to review and improve storage and conservation of collections.
- ❑ Continue electronic cataloging and digitizing images of collections.
- ❑ Work toward strengthening technology infrastructure and linkages of computerized databases of the catalogued collections and images of objects.

AREAS OF MEASUREMENT

- ❑ Continued implementation of the Institution's collections policy, incorporating acquisition, access, storage, conservation, and sharing through loans.
- ❑ Improvements in storage of collections.
- ❑ Continuation of research on collections care and conservation.
- ❑ Seek to increase the number of computerized collections databases and digitization of selected collections
- ❑ Seek to increase the number of linkages of databases, both of collections and images of objects.

GOAL II

Diffuse Knowledge Through Exhibitions, Publications, Programs, Electronic Communications, and Affiliations; and Through Improvements in Education and Museum Training Opportunities

OBJECTIVE ❶

Provide exhibitions, publications and programs that are balanced and of the highest quality; assure appropriate representation of the contributions of various ethnic groups to the cultural and artistic heritage of the United States; enhance presentation of research and education activities; and reach under-served audiences.

STRATEGIES

- ❑ Continue to refine procedures for review of plans for major new exhibitions.
- ❑ Continue planned schedule of exhibition renewal and restoration, in line with determined priorities.
- ❑ Continue program of traveling exhibitions and other means of sharing collections and research outside of Washington.

AREAS OF MEASUREMENT

- ❑ Continue implementation of new exhibition scheduling system.
- ❑ Quality and quantity of exhibitions aimed at providing outreach to under-served or under-represented groups.
- ❑ Quality and quantity of traveling exhibitions.
- ❑ Survey of exhibition visitors to determine their perceptions of the exhibitions and if they received intended message.
- ❑ Quality and quantity of new exhibits, and restoration, renewal, or expansion of existing exhibits where required.

OBJECTIVE ❷

Continue to take advantage of the opportunities provided by electronic communication and information technology.

STRATEGIES

❑ Continue to expand and renew the information available on the Institution's World Wide Web site.

❑ Explore additional methods of making collections available beyond the Mall, such as television, video, and digital imaging.

AREAS OF MEASUREMENT

❑ Expand, if necessary, and keep materials current on the Smithsonian website.

❑ Record the number of visits to the Smithsonian website and seek demographic information on visitors.

❑ Surveys/feedback on the usefulness/impact of the website.

❑ Seek to increase the number of museum objects recorded in digital form.

❑ Seek to increase the number of new television or video presentations and the number of viewers/buyers.

OBJECTIVE ❸

Build collaborative partnerships with other museums, research centers, and educational institutions throughout the nation.

STRATEGIES

❑ Increase public access to the collections through affiliations with other museums or organizations.

❑ Continue the exchange of professional personnel and access for students through partnerships with other research institutions.

AREAS OF MEASUREMENT

❑ Continued implementation of Institutional policy on affiliations: the number and scale of affiliation agreements involving long term loans of collections.

❑ The number of research partnerships in research institutes and museums, and the number of students provided access through research partnerships.

OBJECTIVE ❹

Apply the Smithsonian's unique resources to enhance pre-school through Grade 12 education and adult education.

STRATEGIES

❑ Using models such as the Smithsonian Early Enrichment Center, the National Science Resources Center, and Smithsonian/school partnerships, extend the involvement of the Institution in the nationwide effort to improve education.

❑ Use the collections and other resources of the Institution to contribute to teacher training, and increased parental and community involvement in pre-school through Grade 12 education.

AREAS OF MEASUREMENT

❑ The quality and number of partnerships with school districts, locally and across the country.

❑ The quality and number of students trained using Smithsonian resources, including through electronic communication technologies.

❑ Number of teachers trained using Smithsonian resources, including through electronic communication technologies.

❑ Surveys or feedback on improvements in teaching and learning resulting from Smithsonian-based training.

OBJECTIVE ❺

Emphasize education both on the Mall and across the country through a variety of means.

STRATEGIES

- ❑ Expand Smithsonian educational programs to reach diverse populations, including unserved or under-served communities.
- ❑ Expand informal education through museum collections and objects-based learning in exhibitions.
- ❑ Expand efforts to provide more information on linkages between research and education/outreach activities.

AREAS OF MEASUREMENT

- ❑ The quality and reach of educational programs aimed at new or under-served audiences
- ❑ The quality and reach of collections and exhibition-based education programs developed
- ❑ The quality and reach of education/outreach activities based on Smithsonian research
- ❑ Periodic studies of the impact of collections and exhibition-based education programs

OBJECTIVE ❻

Continue to use the Smithsonian's unique resources to provide training to museum professionals and aspirants.

STRATEGIES

- ❑ Continue to provide Smithsonian-based training and professional support to museum professionals.
- ❑ Continue to provide training and other educational and outreach services to interns, students, postgraduates and others interested in museum careers, with particular attention to under-served communities.

AREAS OF MEASUREMENT

- ❑ Number of museum professionals trained at the Smithsonian
- ❑ Number of seminars and other special training opportunities provided
- ❑ Number of interns and students employed or placed in programs at the Smithsonian
- ❑ Proportion of interns, students, and museum professionals trained representing under-served communities

GOAL III

Support Increased Knowledge and Diffusion Through Improvements in Finance, Management, and Physical Infrastructure of the Institution

OBJECTIVE ❶

Continue to streamline and improve work processes through reengineering, automation, and review/delegation of authorities to units where appropriate.

STRATEGIES

- ❑ Review policies and procedures to ensure they are simple, ensure clear accountability, and distinguish appropriately between responsibilities of central administration and the units.
- ❑ Include decentralization of activities in planning, where appropriate.
- ❑ Provide units with appropriate tools and authorities to accomplish their goals efficiently and effectively.

AREAS OF MEASUREMENT

- ❑ Number of organizational changes reflecting efficiencies through decentralization or other means
- ❑ Number of policy directives relating to central versus decentralized responsibility reviewed and/or revised
- ❑ Improvements in work processes, including automating systems
- ❑ Financial savings (or cost avoidance) resulting from improvements in work processes

OBJECTIVE ❷

Seek to enhance personnel and procurement policies and practices.

STRATEGIES

- ❑ Explore mechanisms for developing a unified Smithsonian personnel system.
- ❑ Review proposals for new systems to insure they are flexible, accountable, rational, and equitable, as well as reflective of the Institution's unique needs.

AREAS OF MEASUREMENT

- ❑ Proposals developed for new or revised personnel system
- ❑ Proposals reviewed, revised and implemented for increased flexibility in personnel and procurement systems

OBJECTIVE ❸

Seek ways to enhance program activities by increasing revenues through fundraising or commercial activities.

STRATEGIES

- ❑ Assist units in increasing their development activities, to provide for facilities needs, protection of collections, exhibitions, education, and electronic outreach activities.
- ❑ Seek approval for and initiate a major capital campaign for the Institution.
- ❑ Continue and expand business activities in order to increase income available for programs and facilities.
- ❑ Develop criteria for assessing the viability of business ventures before they are undertaken.

AREAS OF MEASUREMENT

- ❑ Increases in fundraising levels in museums, research institutes and other units
- ❑ Development and initiation of major capital campaign
- ❑ Level of net income generated from business activities

OBJECTIVE ❹

Seek to enhance improvements in the physical infrastructure of the Institution.

STRATEGIES

- ❑ Continue emphasis on repair and restoration of facilities, which are national monuments.
- ❑ Seek improvements in infrastructure, including new buildings required to protect existing collections, through public/private partnerships.

AREAS OF MEASUREMENT

- ❑ Progress made in construction of facilities for protection of existing collections (National Museum of the American Indian; National Air and Space Museum Dulles Center)
- ❑ Management of funding for renovation, repair and maintenance projects
- ❑ Decline in backlog of repair and rehabilitation projects

RELATIONSHIP OF THE STRATEGIC PLAN GOALS AND OBJECTIVES TO THE GOALS OF THE PERFORMANCE PLAN

The Smithsonian has prepared and submitted an annual performance plan with each budget request since FY 1999. The FY 2001 performance plan includes seven goals, which are tied directly to the programs of the Institution: research and collections management; education, public programs and exhibitions; administration; and facilities and security. Each of the performance goals is also directly related to the strategic goals and objectives of the Institution.

For the most part, the performance plan goals are more narrowly focused than the Strategic Plan goals, and reflect the specific activities the Institution and its units will engage in during fiscal year 2001 to make progress towards achieving the Institution's strategic goals. The measurements and milestones included in the performance plan will enable the Institution to gauge its progress during fiscal year 2001 in reaching the strategic goals, and will also provide important information as to whether the strategic goals need to be adjusted in future years.

ADVISORY BOARDS AND COMMISSIONS

Anacostia Museum Board

Archives of American Art Board of Trustees

Cooper-Hewitt, National Design Museum Board of Trustees

Folklife Advisory Council

Folkways Advisory Committee

Freer Gallery of Art Visiting Committee

Hirshhorn Museum and Sculpture Garden Board of Trustees

National Air and Space Museum Advisory Board

National Museum of African Art Commission

National Museum of American Art Commission

National Museum of American History Board

National Museum of the American Indian Board of Trustees

National Museum of Natural History Board

National Portrait Gallery Commission

National Postal Museum Advisory Commission

National Science Resources Center Advisory Board

National Zoological Park National Advisory Board

Arthur M. Sackler Gallery Visiting Committee

Smithsonian Environmental Research Center Advisory Board (proposed)

Smithsonian Institution Archives and Special Collections Council

Smithsonian Institution Libraries Users Advisory Committee

VISITS TO THE SMITHSONIAN
FY 1995 – FY 1999

MUSEUM	FY 1995	FY 1996	FY 1997	FY 1998	FY 1999
MALL					
SI Castle	1,743,169	1,722,551	1,812,172	1,890,838	1,854,903
A&I Building	917,027	725,620	986,348	875,853	742,415
Natural History	5,842,987	5,171,318	5,859,717	6,476,700	7,076,380
Air and Space	8,297,873	6,935,989	8,348,096	10,238,890	9,410,872
Freer Gallery	444,090	321,005	290,939	330,104	364,305
Sackler Gallery	198,827	164,395	176,627	207,653	213,276
African Art	307,382	232,352	227,703	232,939	245,786
Ripley Center	153,954	141,548	134,579	300,147	333,537
American History	4,828,078	4,578,490	5,106,387	5,579,039	5,680,001
Hirshhorn	809,435	742,139	767,229	829,782	795,646
OFF MALL					
Amer Art/Portrait	400,258	298,150	374,494	550,087	362,854
Renwick	117,066	98,832	132,481	130,700	125,910
Anacostia[1]	50,031	39,900	7,206	26,100	25,794
Cooper-Hewitt[2]	89,073	25,246	100,804	131,949	108,579
American Indian	321,585	318,891	577,962	615,697	587,546
National Zoo[3]	3,000,000	2,700,000	2,700,000	2,700,000	2,617,823
Postal Museum	381,042	341,210	450,288	423,760	461,743
TOTAL	**27,901,877**	**24,557,636**	**28,053,032**	**31,540,238**	**31,007,370**

1- Closed to the public December 1996 through January 1998 and September 1998
2- Galleries closed to the public August 1995 through September 1996; the Garden remained open.
3- Number of visitors provided by NZP staff and is based on a sampling system.

SPECIAL FOREIGN CURRENCY PROGRAM

Program of Grants for Research - Through its Special Foreign Currency Program, the Smithsonian makes grants to United States universities, museums, and other institutions of higher learning (including the Institution itself) primarily for research and advanced professional training in fields of traditional Smithsonian competence.

Excess currency appropriations directly funded the program through FY 1986. Outlays from budget authority provided through FY 1986, including the Forward-funded Reserve for the American Institute of Indian Studies, have continued through the 1990s. In addition, since FY 1986 the Smithsonian has received allocations of U.S.-owned Indian rupees from funds appropriated to the Department of State in FY 1985 for the establishment of the U.S.-India Fund for Education, Cultural, and Scientific Cooperation.

Since its initiation in 1965, the Smithsonian Foreign Currency Program has been a major source of support for research carried out by United States institutions in those countries for which excess foreign currencies are available. The full responsibility for the design, execution, and publication of research results rests with the scholar working within a program of a United States institution. Smithsonian foreign currency grants strengthen the fundamental research and training activities of collaborating institutions abroad, because most projects directly involve host country institutions and scholars. Enduring professional ties, which result from joint efforts and scholarly exchange, contribute to the strongest form of United States cultural relations with other nations. These ties also contribute to the global integration of research data in the sciences. As a result of this interaction, the gap between scholars from industrial and developing nations has narrowed. Moreover, research sponsored by the program aims, in part, to improve understanding of the environment, as well as management and conservation of scarce natural and cultural resources threatened by the rapid growth of world population and technological development.

In FY 1999, ongoing research supported by these grants included projects in archeology, anthropology, art history, natural sciences, and astrophysics.

Forward-Funded Reserve for the American Institute of Indian Studies - Since 1967, the Smithsonian has provided annual funding through the Special Foreign Currency Program to the American Institute of Indian Studies (AIIS) for its fellowships, research, symposia, and publications programs, as well as for its administrative costs. The Smithsonian has helped sustain this Institute and other American research centers abroad for more than 30 years because of their contributions to scholarship and science without regard to national boundaries and because of their special service to American scholars.

With Special Foreign Currency Program funding received from FY 1980 through FY 1985, the Smithsonian established a forward-funded reserve of $7,170,000 equivalent in rupees. This reserve enabled the AIIS to sustain its programs after the removal of India from the excess currency list in 1985. Since FY 1986 AIIS, with oversight from the Smithsonian, has drawn upon funds in this reserve for its fellowship program and administrative costs in India. The Institution continues to examine annual proposals through its peer review system before releasing funds to AIIS.

The reserve should provide core support for AIIS programs well into the new millenium. In 1990 Congress authorized the deposit of the reserve in interest-bearing (rupee) accounts in order to help continue the viability of the fund. In FY 1993, the first deposits totaling an equivalent of $4,000,000 were made to the interest-bearing accounts. Most of the funds remaining in the reserve were deposited into interest-bearing accounts in FY 1995. The first draw-down of those funds occurred in 1998 when the last rupee grant was made.

U.S.-India Fund for Educational, Cultural, and Scientific Cooperation - In FY 1985, Congress appropriated $100,000,000 equivalent in U.S.-owned Indian rupees to the Department of State to establish the U.S.-India Fund for Educational, Cultural, and Scientific Cooperation. Since FY 1986, the Smithsonian has received allocations from this fund to continue programs in India similar to those administered under the Special Foreign Currency Program, which would otherwise have ended when India lost excess currency status in 1985. The Institution has received a total of $17,600,000 through FY 1996. The FY 1997 final allocation of the principal totaled $1,100,000 equivalent. Based on current requirements, the principal of the U.S.-India fund was totally obligated by January 1998, signaling the last of the U.S.-owned rupee grants.

NONAPPROPRIATED RESOURCES

In addition to support provided by Federal appropriations, the Institution receives nonappropriated funds to expand and enrich its programs. The following provides an overview of all sources of funding.

The Institution's nonappropriated funds, known as Trust funds, include general Trust funds with limited or no restrictions on their use, designated funds restricted by the donor or sponsor, and government grants and contracts. Projections are subject to the uncertainty of the size of donations, grants, and contracts; to fluctuations in visitor attendance; and to the volatility of the economy, which directly affects the return on the endowment as well as restaurant, mail order, and museum shop revenues, memberships, and other auxiliary activities. The Institution's gross operating revenue, less the expenses of the auxiliary activities, represents the net operating revenue available for programmatic and related purposes. The following table provides a summary of the sources of nonappropriated operating funds.

(Dollars in Millions)	FY 1999 Actual	FY 2000 Estimate
General Trust	48.9	48.5
Donor/Sponsor Designated	55.7	64.3
Government Grants &Contract	63.7	70.2
Total Available for Operations	168.3	183.0

SOURCE AND APPLICATION OF NONAPPROPRIATED TRUST FUNDS - Information on the application of General Trust funds, designated funds, and government grants and contracts for FY 1999, FY 2000, and FY 2001 is provided with each line item in this budget. The following describes the sources of each category of Trust funds as well as a general description of their application.

General Trust Funds - The sources of General Trust funds are investment income; earnings from unrestricted endowments; net proceeds from the museum shops, mail order, and food service concessions; sales of Smithsonian books, records, and other products based on designs and objects in the collections; theater/planetarium operation at the National Air and Space Museum; rental of exhibitions of the Smithsonian Institution Traveling Exhibition Service; membership programs (including *Smithsonian* and *Air and Space* magazines); the sale of posters, exhibition brochures, catalogs, and other publications; admission fees; and overhead recovery on government grants and contracts received. Projected sources of FY 2000 General Trust funds total $48,500,000.

Overhead recovery is the principal source of Trust support for central management and administrative service units of the Institution, including legal counsel, accounting, personnel, contracting, and budget. General Trust funds also support activities of units such as Cooper-Hewitt, National Design Museum; Center for Folklife and Cultural Heritage; Office of Membership and Development; Smithsonian Tropical Research Institute; Visitor Information and Associates' Reception Center; and other Institutional and unit-based programs. The Board of Regents approves allocations to these activities.

General Trust funds also support fellowship and award programs and exhibitions. FY 2000 funding of $1,900,000 will be provided for various fellowship programs. Awards under the Institution's Collections Acquisition, Educational Outreach, and Scholarly Studies programs are projected in the FY 2000 budget to total $2,000,000. These awards will provide

- $512,000 to purchase exceptional objects important to the collections

- $226,000 to conduct a wide range of educational outreach programs with a special focus on diverse audiences

- $1,300,000 for innovative scholarly research projects initiated by the Institution's research staff, occasionally in collaboration with scholars from other institutions.

The Institution supports exhibition programs with Federal funds and with donations from individuals, foundations, and corporations, as well as its Special Exhibition Fund (SEF). This General Trust fund, with $1,100,000 in FY 2000, provides an important source of funds for temporary and permanent exhibitions proposed by Smithsonian units that, regardless of scale, are of outstanding educational value to the public. The SEF allows units to explore new or expand current interpretive or exhibition techniques; supports exhibits that are worthy but, by their nature, unlikely to attract major private contributions; and allows for development of exhibits targeted to reach previously underserved audiences.

Donor/Sponsor Designated Funds - Designated Trust funds include gifts, grants, and earnings on endowments from individuals, foundations, organizations, and corporations that specify the purpose of the funds. Designated funds in FY 2000 are projected to total $64,300,000. Generally, these funds support a particular exhibition or research project.

The Freer endowment, the Institution's largest designated endowment, accounts for nearly one quarter of Smithsonian endowment principal.

Government Grants and Contracts - Various Government agencies and departments provide grants and contracts for projects that only the Smithsonian can conduct because of its expertise in a particular area of science, history, art, or education and because of its ability to respond quickly to certain needs. For FY 2000, government grants and contracts are projected to be $70,200 000. Of this amount, $57,100,000 is provided for astrophysical research and development carried out by the Smithsonian Astrophysical Observatory.

APPROPRIATION LANGUAGE AND CITATIONS

The Act of August 10, 1846, 9 Stat. 102-106, 20 U.S.C.§§ 41-70, established the Smithsonian Institution "for the increase and diffusion of knowledge," and provided the organizational structure for the Institution's administration. The mission of the Smithsonian Institution has remained unchanged throughout its 153-year history, although additional authority for many of the Institution's programs and operations has been enacted over the years. Those statutes, along with the Smithsonian charter, are cited below as the authority for the Smithsonian Institution appropriation language, except where specific authorizing language has been included in the wording of the appropriation itself.

Appropriation: Salaries and Expenses

1. For necessary expenses of the Smithsonian Institution, as authorized by law, including research in the fields of art, science, and history;

20 U.S.C.§§ 50, 53a, 69, 75b(b), 76bb(c), 77a, 78, 80a(a), 80m, 80q-1(b)(1),(3) provide that (1) "...all objects of art and of foreign and curious research, and all objects of natural history, plants, and geological and mineralogical specimens...shall be so arranged and classified...as best to facilitate the examination and study of them..." (2) "Appropriations are authorized for...the making of solar observations at high altitudes..." (3) "The Secretary of the Smithsonian Institution is hereby authorized...to continue independently or in cooperation anthropological researches among the American Indians and the natives of lands under the jurisdiction or protection of the United States..." (4) "The Gallery [National Portrait Gallery] shall function as a free public museum for the exhibition and study of portraiture and statuary depicting men and women who have made significant contributions to the history, development, and culture of the people of the United States and of the artists who created such portraiture and statuary." (5) "The Joseph H. Hirshhorn Museum and Sculpture Garden...shall be used for the storage, exhibition, and study of works of art..." (6) "The national air and space museum shall...provide educational material for the historical study of aviation and space flight." (7) "The Secretary of the Smithsonian Institution is authorized to cooperate with any State, educational institution, or scientific organization in the United States for continuing paleontological investigations..." (8) "It shall be equipped with

a study center for scholarly research into the meaning of war, its effect on civilization, and the role of the armed forces..." (9) "...the Board may...conduct programs of research and education (in the Museum of African Art)..."(10) The purposes of the National Museum [of the American Indian] are to (1) advance the study of Native Americans, including the study of language, literature, history, art, anthropology, and life...(3) provide for Native American research and study programs.

2. development, preservation, and documentation of the National Collections;

20 U.S.C.§§ 50, 50a, 59, 69, 75e, 76c, 76cc(a), 77a, 80a, 80m, 80q-1(b)(2), 81 provide that (1) "...all objects of art and of foreign and curious research, and all objects of natural history, plants, and geological and mineralogical specimens...shall be delivered to such persons as may be authorized by the Board of Regents to receive them, and shall be so arranged and classified...as best to facilitate the examination and study of them..." (2) "The Smithsonian Institution is authorized to include in its estimates of appropriations such sums as may be needful for the preservation and maintenance of the John Gellatly art collection." (3) "All collections of rocks, minerals, soils, fossils, and objects of natural history, archaeology, and ethnology...when no longer needed for investigations in progress shall be deposited in the National Museum." (4) "The Secretary of the Smithsonian Institution is hereby authorized...to continue independently or in cooperation...the excavation and preservation of archaeological remains." (5) "...the Board may - (1) purchase, accept, borrow, or otherwise acquire portraiture, statuary, and other items for preservation, exhibition, or study." (6) "...the Regents are authorized...to acquire (by purchase or otherwise) and sell contemporary works of art or copies thereof..." (7) "There is established in the Smithsonian Institution a Board of Trustees...which shall have the sole authority (i) to purchase or otherwise acquire...works of art for the Joseph H. Hirshhorn Museum and Sculpture Garden..." (8) "The national air and space museum shall...collect, preserve, and display aeronautical and space flight equipment of historical interest and significance..." (9) "...the Smithsonian Institution shall collect, preserve, and exhibit military objects of historical interest and significance." (10) "...the Board may purchase,

accept, borrow or otherwise acquire additional works of art or any other real or personal property for the Museum (of African Art); preserve, maintain, restore...or otherwise hold any property of whatsoever nature acquired..." (11) "The purposes of the National Museum [of the American Indian] are to...(2) collect, preserve, and exhibit Native American objects of artistic, historical, literary, anthropological, and scientific interest..." (12) "The National Zoological Park is placed under the direction of the Regents of the Smithsonian Institution, who are authorized to transfer to it any living specimens, whether of animals or plants, in their charge, to accept gifts for the park...to make exchanges of specimens..."

3. presentation of public exhibits and performances;

20 U.S.C.§§ 75b(b), 76c(b), 76bb(c), 77a, 80a(a), 80m(a), 80q-1(b) provide that (1) "The Gallery [National Portrait Gallery] shall function as a free public museum for the exhibition and study of portraiture and statuary..." (2) "In order to encourage the development of contemporary art and to effect the widest distribution and cultivation in matters of such art, the Regents are authorized to...conduct exhibitions..." (3) "The Joseph H. Hirshhorn Museum and Sculpture Garden...shall be used for the storage, exhibition, and study of works of art..." (4) "The national air and space museum shall...collect, preserve, and display aeronautical and space flight equipment of historical interest and significance..." (5) "...the Smithsonian Institution shall collect, preserve, and exhibit military objects of historical interest and significance." (6) "...the Board may...display...any property of whatsoever nature acquired (for the Museum of African Art)..." (7) "The purposes of the National Museum [of the American Indian] are to...(2) collect, preserve, and exhibit Native American objects of artistic, historical, literary, anthropological, and scientific interest..."

4. collection, preparation, dissemination, and exchange of information and publications;

20 U.S.C.§ 53a provides that "Appropriations are authorized for the...preparation of manuscripts, drawings, and illustrations for publication."

5. conduct of education, training, and museum assistance programs;

20 U.S.C.§ 65a provides "The Director of the National Museum under the direction of the Secretary of the Smithsonian Institution shall - (1) cooperate with museums and their professional organizations in a continuing study of museum problems and opportunities, both in the United States and abroad; (2) prepare and distribute significant museum publications; (3) perform research on, and otherwise contribute to, the development of museum techniques..."

20 U.S.C.§ 77a provides that "The national air and space museum shall...provide educational material for the historical study of aviation and space flight."

20 U.S.C.§ 79a provides that "The purpose of setting aside such an area [Barro Colorado Island] is to preserve and conserve its natural features...thus providing a place where duly qualified students can make observations and scientific investigations for increase of knowledge, under such conditions and regulations as may be prescribed by the Smithsonian Institution."

20 U.S.C. § 79e provides that "There are authorized to be appropriated annually...such sums as are necessary for the administration of [the Canal Zone Biological Area] for the maintenance of laboratory or other facilities..."

The Panama Canal Treaty and ancillary agreements vest in the Smithsonian Tropical Research Institute responsibility to serve as custodian of the Barro Colorado Nature Monument. The Panama Canal Act of 1979, Public Law 96-70, as amended, implements the provisions of the Panama Canal Treaty.

20 U.S.C.§ 80m(a)(3) provides that "...the Board may...conduct programs of research and education (in the Museum of African Art)..."

6. maintenance, alteration, operation, lease (for terms not to exceed thirty years), and protection of buildings, facilities, and approaches;

20 U.S.C.§§ 53a, 76g, 76ee, 79b, 80m, 81 provide that (1) "Appropriations are authorized for the maintenance of the Astrophysical Observatory and...for repairs and alterations of buildings and grounds occupied by the Smithsonian Institution

in the District of Columbia and elsewhere..." (2) "There are authorized to be appropriated annually such sums as may be necessary to maintain and administer the Gallery [National Portrait Gallery]..." (3) "There is authorized to be appropriated...such additional sums as may be necessary for the maintenance and operation of such [Hirshhorn] [M]useum and [S]culpture [G]arden." (4) "The Smithsonian Institution shall...be responsible for the construction and maintenance of laboratory and other facilities on the area provided for the use of students authorized to carry on studies within the confines of the area..." (5) "...the Board may...preserve, maintain...any property of whatsoever nature acquired (for the Museum of African Art)..." (6)"The National Zoological Park is placed under the direction of the Regents of the Smithsonian Institution, who are authorized...to administer and improve the said Zoological Park for the advancement of science and the instruction and recreation of the people." Public Law 101-512 making appropriations for the Department of the Interior and Related Agencies for the fiscal year 1991 extended the maximum term from ten years to thirty years.

7. not to exceed $_____for services as authorized by 5 U.S.C. 3109;

5 U.S.C.§ 3109 provides that "When authorized by an appropriation or other statute, the head of an agency may procure by contract the temporary (not in excess of 1 year) or intermittent services of experts or consultants or an organization thereof, including stenographic reporting services."

8. up to 5 replacement passenger vehicles;

31 U.S.C.§ 1343 provides that "(b) An appropriation may be expended to buy or lease passenger motor vehicles only-- (1) for the use of--...or, (2) as specifically provided by law."

9. purchase, rental, repair, and cleaning of uniforms for employees,

5 U.S.C.§ 5901 provides that "(a) There is authorized to be appropriated annually to each agency of the Government of the United States,...on a showing of necessity or desirability, such sums as may be necessary to carry out this subchapter. The head of the agency concerned...shall-- (1) furnish to

these employees a uniform at a cost not to exceed $400 a year...or (2) pay to each of these employees a allowance for a uniform not to exceed $400 a year..."
40 U.S.C.§ 193t provides that "The special police provided for in section 193n of this title [Smithsonian Institution]...may be furnished, without charge, with uniforms and such other equipment as may be necessary for the proper performance of their duties..."

10. of which not to exceed $_____ for the instrumentation program, collections acquisition, Museum Support Center equipment and move, exhibition reinstallation, the National Museum of the American Indian, the repatriation of skeletal remains program, research equipment, information management, and Latino programming shall remain available until expended

Wording added by the Congress in Public Law 100-446 making appropriations for the Department of the Interior and related agencies for the fiscal year 1989 to permit the Institution to establish no-year funding within the Salaries and Expenses account for the development of major scientific instrumentation. Public Law 101-512 making appropriations for the Department of the Interior and Related Agencies for the fiscal year 1991 also allowed no-year funding to be used for purchases for museum collections; the costs of purchasing collections storage equipment and the preparation of objects and the move of collections to the Museum Support Center; the design, production, and reinstallation of museum exhibitions; the operating costs associated with the new National Museum of the American Indian; and the repatriation of skeletal remains. In addition, Public Law 103-332 making appropriations for the Department of the Interior and Related Agencies for the fiscal year 1995 established no-year funding for research equipment; information technology needs; and Latino programming at the Institution.

31 U.S.C.§ 1301(c) provides "An appropriation in a regular, annual appropriation law may be construed to be permanent or available continuously only if the appropriation ... (2) expressly provides that it is available after the fiscal year covered by the law in which it appears."

11. and of which $_____ shall remain available until expended for the

National Museum of Natural History's Arctic Studies Center to include assistance to other museums for the planning and development of institutions and facilities that enhance the display of collections,

Wording added by the Congress in Department of the Interior and Related Agencies Appropriations Act, 2000, as enacted by section 1000(a)(3), Division B of the Consolidated Appropriations Act, 2000 (Public Law 106-113, approved November 29, 1999).

12. and including such funds as may be necessary to support American overseas research centers and a total of $_____ for the Council of American Overseas Research Centers:

Wording added by the Congress in Public Law 99-190 making appropriations for the Department of Interior and Related Agencies in 1986. Public Law 100-446 making appropriations for the Department of the Interior and Related Agencies for the fiscal year 1989 modified reference to add specific dollar sum to be provided to the Council of American Overseas Research Centers.

13. Provided, That funds appropriated herein are available for advance payments to independent contractors performing research services or participating in official Smithsonian presentations:

31 U.S.C.§ 3324 provides that "(b) An advance of public money may be made only if it is authorized by-- (1) a specific appropriation or other law..."

14. Provided further, That the Smithsonian Institution may expend Federal appropriations designated in this Act for lease or rent payments for long term and swing space, as rent payable to the Smithsonian Institution, and such rent payments may be deposited into the general trust funds of the Institution to the extent that federally supported activities are housed in the 900 H Street, N.W. building in the District of Columbia: Provided further, That this use of Federal appropriation shall not be construed as debt service, a Federal guarantee of, a transfer of risk to, or an obligation of, the Federal Government; Provided further, That no appropriated funds may be used to service debt which is incurred to finance the costs of acquiring the 900 H Street building or of planning, designing, and constructing improvements to such building.

Wording added by the Congress in Department of the Interior and Related Agencies Appropriations Act, 2000, as enacted by section 1000(a)(3), Division B of the Consolidated Appropriations Act, 2000 (Public Law 106-113, approved November 29, 1999).

Appropriation: Repair, Rehabilitation and Alteration of Facilities (Including Transfers of Funds)

1. For necessary expenses of repair, rehabilitation and alteration of facilities owned or occupied by the Smithsonian Institution, by contract or otherwise, as authorized by section 2 of the Act of August 22, 1949 (63 Stat. 623),

   Act of August 22, 1949 (63 Stat. 623), 20 U.S.C.§ 53a, provides that "Appropriations are authorized...for repairs and alterations of buildings and grounds occupied by the Smithsonian Institution in the District of Columbia and elsewhere..."

   20 U.S.C.§ 81 provides that "The National Zoological Park is placed under the direction of the Regents of the Smithsonian Institution, who are authorized...to administer and improve the said Zoological Park for the advancement of science and the instruction and recreation of the people."

2. including not to exceed $_____for services as authorized by 5 U.S.C. 3109,

   5 U.S.C.§ 3109 provides that "When authorized by an appropriation or other statute, the head of an agency may procure by contract the temporary (not in excess of 1 year) or intermittent services of experts or consultants or an organization thereof, including stenographic reporting services."

3. to remain available until expended,

   31 U.S.C.§ 1301 provides "An appropriation in a regular, annual appropriation law may be construed to be permanent or available continuously only if the appropriation---... expressly provides that it is available after the fiscal year covered by the law in which it appears."

4. of which $_____ is provided for repair, rehabilitation and alteration of facilities at the National Zoological Park:

> Wording added by the Congress in Department of the Interior and Related Agencies Appropriations Act, 2000, as enacted by section 1000(a)(3), Division B of the Consolidated Appropriations Act, 2000 (Public Law 106-113, approved November 29, 1999) for clarification.

5. Provided, That contracts awarded for environmental systems, protection systems, and repair or rehabilitation of facilities of the Smithsonian Institution may be negotiated with selected contractors and awarded on the basis of contractor qualifications as well as price:

> Wording added to allow for negotiations with the most competent firms for restoration and renovation work where it can be certified that such work must be performed to meet the special needs of historic structures, the protection of collections, or public safety.

6. Provided further, That funds previously appropriated to the "Construction and Improvements, National Zoological Park" account and the "Repair and Restoration of Buildings" account may be transferred to and merged with this "Repair, Rehabilitation and Alteration of Facilities" account.

> Wording added by the Congress in Department of the Interior and Related Agencies Appropriations Act, 2000, as enacted by section 1000(a)(3), Division B of the Consolidated Appropriations Act, 2000 (Public Law 106-113, approved November 29, 1999) to allow for consolidation of the Institution's capital accounts.

Appropriation: Construction

1. For necessary expenses for construction,

> 20 U.S.C.§ 53a provides that "Appropriations are authorized...for repairs and alterations of buildings and grounds occupied by the Smithsonian Institution in the District of Columbia and elsewhere..."

2. to remain available until expended.

> 31 U.S.C.§ 1301(c) provides "An appropriation in a regular, annual appropriation law may be construed to be permanent or available continuously only if the appropriation... (2) expressly provides that it is available after the fiscal year covered by the law in which it appears."

ADJUSTMENTS TO FY 2000 FUNDING

(Dollars in Thousands) Unit	FY 2000 Congressional Appropriation /1	Reorganizations and Permanent Reprogramming	Revised FY 2000 Appropriation
MUSEUMS AND RESEARCH INSTITUTES			
Anacostia Museum and Center for African American History and Culture	1,880	(5) /11	1,875
Archives of American Art	1,685	(5) /11	1,680
Arthur M. Sackler Gallery/Freer Gallery of Art	6,064	(5) /11	6,059
Center for Folklife and Cultural Heritage	1,750	0	1,750
Cooper-Hewitt, National Design Museum	2,869	(3) /11	2,866
Hirshhorn Museum and Sculpture Garden	4,615	0	4,615
National Air and Space Museum	13,228	0	13,228
National Museum of African Art	4,253	0	4,253
National Museum of American Art	8,616	8 /7	8,624
National Museum of American History	20,411	149 /9	20,560
National Museum of the American Indian	22,090	0	22,090
National Museum of Natural History	45,157 /1	61 /5,6	45,218
National Portrait Gallery	5,619	7 /7	5,626
National Zoological Park	20,463	(10) /4,6	20,453
Smithsonian Astrophysical Observatory	19,847	38 /7	19,885
Smithsonian Center for Materials Research and Education	3,170	(5) /11	3,165
Smithsonian Environmental Research Center	3,204	2 /3	3,206
Smithsonian Tropical Research Institute	9,951 /1	(21) /11	9,930
Subtotal	194,872	211	195,083

ADJUSTMENTS TO FY 2000 FUNDING

(Dollars in Thousands) Unit	FY 2000 Congressional Appropriation /1	Reorganizations and Permanent Reprogramming	Revised FY 2000 Appropriation
PROGRAM SUPPORT AND OUTREACH			
Communications and Educational Programs	5,503	(124) /9,10,11	5,379
Institution-wide Programs	5,693	0	5,693
Office of Exhibits Central	2,319	0	2,319
Major Scientific Instrumentation	7,244	0	7,244
Museum Support Center	4,494 /1	(3) /11	4,491
Smithsonian Institution Archives	1,443	50 /2	1,493
Smithsonian Institution Libraries	7,330	(57) /7,11	7,273
Smithsonian Institution Traveling Exhibition Service	3,093	(46) /8	3,047
Subtotal	37,119	(180)	36,939
ADMINISTRATION	34,619	(3) /2,3,4,5,8, 10,11	34,616
FACILITIES SERVICES			
Office of Protection Services	33,582 /1	(28) /11	33,554
Office of Physical Plant	71,038 /1	0	71,038
Subtotal	104,620	(28)	104,592
GRAND TOTAL	**371,230** /1	**0**	**371,230**

Footnotes for FY 2000 Appropriation:

1/ FY 2000 appropriation includes rescission of $1,671,000.
2/ Transfer of funding from Administration to the Smithsonian Institution Archives.
3/ Transfer of funding from Administration to the Smithsonian Environmental Research Center.
4/ Transfer of one position and funding from the National Zoological Park to Administration.
5/ Transfer of one position and funding from Administration to the National Museum of Natural History.
6/ Transfer of one position and funding from the National Museum of Natural History to the National Zoological Park.
7/ Transfer of funding from the Smithsonian Institution Libraries to the Smithsonian Astrophysical Observatory, the National Portrait Gallery, and the National Museum of American Art.
8/ Transfer of one position and funding from the Smithsonian Traveling Exhibition Service to Administration.
9/ Transfer of two positions and funding from Communications and Educational Programs to the National Museum of American History.
10/ Transfer of one position and funding from Administration to Communications and Educational Programs.
11/ Transfer of funding from the Anacostia Museum and Center for African American History and Culture, Archives of American Art, Arthur M. Sackler/Freer Gallery of Art, Cooper-Hewitt, National Design Museum, Smithsonian Center for Materials Research and Education, Smithsonian Tropical Research Institute, Communications and Educational Programs, Museum Support Center, Smithsonian Institution Libraries, and Office of Protection Services to Administration.

SMITHSONIAN INSTITUTION

Repair, Restoration and Alteration of Facilities

DETAIL OF
FY 2001 - FY 2005 FIVE-YEAR PROGRAM

Congressional Request

Prepared by the
PROJECT MANAGEMENT DIVISION
OFFICE OF PHYSICAL PLANT

January 14, 2000

Repair, Restoration and Alteration of Facilities
FY 2001 - FY 2005 FIVE-YEAR PROGRAM

Congressional Request

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Definitions

Repair, Restoration and Alteration of Facilities Program

Major Capital Renewal

Provides funds for the cyclical replacement of major building systems and equipment and major renovation projects required for the preservation of the buildings. Primarily addresses the major replacement requirements for HVAC and electrical systems at the older buildings where systems are nearing the end of their service lives.

Code Compliance and Security

Fire Detection and Suppression Projects

Provides fire protection and safety measures meeting today's standards with state-of-the-art technology. Typically includes installation of detection systems such as smoke alarms, suppression systems such as sprinklers, and architectural modifications to create fire zones by installing fire walls and doors

Access, Safety, and Security Projects

Provides better access to facilities for persons with disabilities, improves environmental conditions for the health and safety of visitors and staff, and corrects facility conditions that threaten the security of the National Collections.

Infrastructure Repair

General Repairs

Provides resources for minor, unscheduled, but essential repairs that the Institution cannot anticipate specially or that do not fit into any one discrete category.

Facade, Roof, and Terrace Repairs

Provides exterior repair and maintenance to building envelopes to prevent major structural and interior damage and deterioration due to age, water intrusion, and weathering.

Utility System Repairs

Maintains, repairs, and upgrades the heating, ventilating, and air conditioning (HVAC) systems and plumbing, electrical, and communications systems. Ensures reliable and energy-efficient operation of utility systems through ongoing renovation, repairs, and replacement of deteriorated equipment.

R&R Planning, Design and Inspection

Supports projects to identify and analyze long-range repair and restoration needs and to design future-year projects in advance of funding requests.

Alterations and Modifications

Provides for smaller, program-oriented construction projects with estimated construction cost less than $1 million.

Explanation of Ranking Codes

R&R Ranking Code System

A Must not defer:

A1 Building Shell Failure, includes
- Active roof leak
- Active wall leak

A2 HVAC, Electrical, Security System Failure, includes
- Active piping leak
- Active or frequent system/equipment failures

A3 Mandated/Unexpected Compliance

B Should not defer (High Priority):

B1 Building Shell Maintenance, includes
- Imminent failure of exterior shell
- Imminent failure of exterior HVAC, electrical, security equipment
- On-going site utility maintenance problem

B2 Building System Maintenance, includes
- Imminent failure of building systems

B3 High priority code improvements includes
- fire and life safety, accessibility, HVAC, electrical, security equipment

C Should not defer (Medium Priority):

C1 Predicted, required repair or maintenance

C2 On-going or phased construction efforts, includes
- Separate but part of on-going construction
- Needed for start of higher priority project
- Needed to properly complete high priority project

C3 Cost-effective payback period, includes
- Energy or maintenance savings payback within 7 years

D Can defer one year or logically phase

E Can defer more than one year

F Should reconsider

A&M Ranking Code System

A Cannot defer:

Critical to success of high priority Institutional program initiative; program cannot be implemented without this project.

B Should not defer:

B1 Part of backlog of A&M requirements to improve operating efficiency.

B2 Part of an ongoing or phased effort, coordinated with other projects, or with significant program considerations.

C Could defer:

Defer construction, design funding should remain in projected year, or construction could be logically phased (suggest minimum funding increment).

D Can defer comfortably for one year

E Can defer more than one year

F Should reconsider

Smithsonian Institution

Repair, Restoration and Alteration of Facilities Program - Five Year Plan

Program Summary

REPAIR AND RESTORATION	*FY'00*	*FY'01*	*FY'02*	*FY'03*	*FY'04*	*FY05*
MAJOR CAPITAL RENEWAL	24,205	34,280	37,695	42,320	31,705	33,475
CODE COMPLIANCE AND SECURITY						
Fire Detection and Suppression	775	725	735	1,160	985	2,260
Access, Safety and Security	4,000	4,458	5,615	2,565	5,965	5,710
INFRASTRUCTURE REPAIR						
General Repair	6,837	7,767	8,025	6,755	8,885	7,500
Facade, Roof and Terrace Repair	1,938	3,940	1,260	955	5,430	3,875
Utility System Repair	5,145	6,080	4,670	4,245	5,030	5,180
R&R Planning, Design and Inspection	2,000	2,000	2,000	2,000	2,000	2,000
SUB-TOTAL FOR R&R PROGRAM	**44,900**	**59,250**	**60,000**	**60,000**	**60,000**	**60,000**
ALTERATIONS & MODIFICATIONS	**3,000**	**2,950**	**5,000**	**6,000**	**6,000**	**6,000**
GRAND TOTAL	**47,900**	**62,200**	**65,000**	**66,000**	**66,000**	**66,000**

Note: All figures in 000s.

Smithsonian Institution

Repair, Restoration and Alteration of Facilities Program - Five Year Plan

ANACOSTIA MUSEUM

REPAIR, RESTORATION AND ALTERATION OF FACILITIES PROGRAM

REPAIR AND RESTORATION	*FY'00*	*FY'01*	*FY'02*	*FY'03*	*FY'04*	*FY05*
1. GENERAL REPAIR						
General Repairs	0	60 B	60 B	60 B	60 B	60 B
Paving & Sidewalk	0	0	0	0	0	150 C1
2. FACADE, ROOF & TERRACE REPAIR						
Facade and Roof Repair & Painting	0	0	0	0	0	0
3. FIRE DETECTION & SUPPRESSION						
No Projects Identified	0	0	0	0	0	0
4. ACCESS, SAFETY & SECURITY						
Interior/Exterior Access	0	0	0	0	0	0
5. UTILITY SYSTEM REPAIR						
Elect./Mech. Study & Modifications (954604)	0	0	0	0	0	0
HVAC Upgrade	0	0	0	0	0	0
Restroom Upgrades	0	0	0	0	0	0
6. ADVANCED PLANNING & INSPECTION						
No Projects Identified	0	0	0	0	0	0
	0	60	60	60	60	210

7. MAJOR CAPITAL RENEWAL	*FY'00*	*FY'01*	*FY'02*	*FY'03*	*FY'04*	*FY05*
No Projects Identified	0	0	0	0	0	0
	0	0	0	0	0	0

	FY'00	FY'01	FY'02	FY'03	FY'04	FY05
TOTAL FOR R&R PROGRAM	0	60	60	60	60	210

ALTERATIONS & MODIFICATIONS	*FY'00*	*FY'01*	*FY'02*	*FY'03*	*FY'04*	*FY05*
No Projects Identified	0	0	0	0	0	0
	0	0	0	0	0	0

	FY'00	FY'01	FY'02	FY'03	FY'04	FY05
FACILITY TOTAL	0	60	60	60	60	210

Smithsonian Institution

Repair, Restoration and Alteration of Facilities Program - Five Year Plan

ARTS & INDUSTRIES BUILDING

REPAIR, RESTORATION AND ALTERATION OF FACILITIES PROGRAM

REPAIR AND RESTORATION	*FY'00*	*FY'01*	*FY'02*	*FY'03*	*FY'04*	*FY05*
1. GENERAL REPAIR						
No Projects Identified	0	0	0	0	0	0
2. FACADE, ROOF & TERRACE REPAIR						
No Projects Identified	0	0	0	0	0	0
3. FIRE DETECTION & SUPPRESSION						
No Projects Identified	0	0	0	0	0	0
4. ACCESS, SAFETY & SECURITY						
No Projects Identified	0	0	0	0	0	0
5. UTILITY SYSTEM REPAIR						
No Projects Identified	0	0	0	0	0	0
6. ADVANCED PLANNING & INSPECTION						
No Projects Identified	0	0	0	0	0	0
	0	0	0	0	0	0

7. MAJOR CAPITAL RENEWAL	*FY'00*	*FY'01*	*FY'02*	*FY'03*	*FY'04*	*FY05*
1. HVAC & ELEC. IMPROVEMENTS - Master Plan Implementation						
Roof Renovation	2,000 A	0	0	0	0	0
Master Plan	0	0	9,620 B2	11,000 B2	17,500 B2	16,700 B2
Design Costs	2,500 B2	2,000 B2	0	0	0	0
	4,500	2,000	9,620	11,000	17,500	16,700

	FY'00	FY'01	FY'02	FY'03	FY'04	FY05
TOTAL FOR R&R PROGRAM	**4,500**	**2,000**	**9,620**	**11,000**	**17,500**	**16,700**

ALTERATIONS & MODIFICATIONS	*FY'00*	*FY'01*	*FY'02*	*FY'03*	*FY'04*	*FY05*
No Projects Identified	0	0	0	0	0	0
	0	0	0	0	0	0

	FY'00	FY'01	FY'02	FY'03	FY'04	FY05
FACILITY TOTAL	**4,500**	**2,000**	**9,620**	**11,000**	**17,500**	**16,700**

Smithsonian Institution

Repair, Restoration and Alteration of Facilities Program - Five Year Plan

COOPER-HEWITT, NATIONAL DESIGN MUSEUM

REPAIR, RESTORATION AND ALTERATION OF FACILITIES PROGRAM

REPAIR AND RESTORATION	*FY'00*	*FY'01*	*FY'02*	*FY'03*	*FY'04*	*FY05*
1. GENERAL REPAIR						
General Repairs	50 B	60 B	60 B	60 B	60 B	60 B
Mansion Interior Restoration (975802)	0	325 B3	350 B3	0	350 B3	0
2. FACADE, ROOF & TERRACE REPAIR						
Mansion Facade & Fence Repair	0	1,300 B3	0	0	0	0
Fox House Exterior Repair	0	0	0	0	0	0
3. FIRE DETECTION & SUPPRESSION						
No Projects Identified	0	0	0	0	0	0
4. ACCESS, SAFETY & SECURITY						
No Projects Identified	0	0	0	0	0	0
5. UTILITY SYSTEM REPAIR						
No Projects Identified	0	0	0	0	0	0
6. ADVANCED PLANNING & INSPECTION						
No Projects Identified	0	0	0	0	0	0
	50	1,685	410	60	410	60

7. MAJOR CAPITAL RENEWAL	*FY'00*	*FY'01*	*FY'02*	*FY'03*	*FY'04*	*FY05*
No Projects Identified	0	0	0	0	0	0
	0	0	0	0	0	0

TOTAL FOR R&R PROGRAM	FY'00	FY'01	FY'02	FY'03	FY'04	FY05
	50	1,685	410	60	410	60

ALTERATIONS & MODIFICATIONS	*FY'00*	*FY'01*	*FY'02*	*FY'03*	*FY'04*	*FY05*
Garden Landscaping	0	0	0	0	0	550 C
	0	0	0	0	0	550

FACILITY TOTAL	FY'00	FY'01	FY'02	FY'03	FY'04	FY05
	50	1,685	410	60	410	610

Smithsonian Institution

Repair, Restoration and Alteration of Facilities Program - Five Year Plan

FREER GALLERY OF ART

REPAIR, RESTORATION AND ALTERATION OF FACILITIES PROGRAM

REPAIR AND RESTORATION	*FY'00*	*FY'01*	*FY'02*	*FY'03*	*FY'04*	*FY05*
1. GENERAL REPAIR						
General Repairs	20 B	20 B	20 B	20 B	20 B	20 B
2. FACADE, ROOF & TERRACE REPAIR						
Courtyard Window & Door Condensation	0	0	0	0	0	0
Skylight Repair (973701)	0	150 B2	0	0	0	0
Entry Sidewalk Repair	0	0	0	0	0	500 C1
3. FIRE DETECTION & SUPPRESSION						
No Projects Identified	0	0	0	0	0	0
4. ACCESS, SAFETY & SECURITY						
Courtyard Lift & Handrails (973703A)	0	0	60 B3	0	0	0
5. UTILITY SYSTEM REPAIR						
Gallery Lighting Systems Replacement	0	0	0	0	350 C1	0
Roof/Storm Sewer Repair (993702)	25 B1	0	0	0	0	100 B1
6. ADVANCED PLANNING & INSPECTION						
No Projects Identified	0	0	0	0	0	0
	45	170	60	20	370	620

7. MAJOR CAPITAL RENEWAL	*FY'00*	*FY'01*	*FY'02*	*FY'03*	*FY'04*	*FY05*
No Projects Identified	0	0	0	0	0	0
	0	0	0	0	0	0

	FY'00	FY'01	FY'02	FY'03	FY'04	FY05
TOTAL FOR R&R PROGRAM	45	170	60	20	370	620

ALTERATIONS & MODIFICATIONS	*FY'00*	*FY'01*	*FY'02*	*FY'03*	*FY'04*	*FY05*
No Projects Identified	0	0	0	0	0	0
	0	0	0	0	0	0

	FY'00	FY'01	FY'02	FY'03	FY'04	FY05
FACILITY TOTAL	45	170	60	20	370	620

Smithsonian Institution

Repair, Restoration and Alteration of Facilities Program - Five Year Plan

HIRSHHORN MUSEUM & SCULPTURE GARDEN

REPAIR, RESTORATION AND ALTERATION OF FACILITIES PROGRAM

REPAIR AND RESTORATION	*FY'00*	*FY'01*	*FY'02*	*FY'03*	*FY'04*	*FY05*
1. GENERAL REPAIR						
No Projects Identified	0	0	0	0	0	0
2. FACADE, ROOF & TERRACE REPAIR						
Window Replacement	0	0	0	0	0	0
Building Facade/Garden	0	0	0	0	4,500 C1	0
3. FIRE DETECTION & SUPPRESSION						
No Projects Identified	0	0	0	0	0	0
4. ACCESS, SAFETY & SECURITY						
Front Entrance	0	0	0	0	850 B3	0
5. UTILITY SYSTEM REPAIR						
Interior Lighting Improvement	0	0	1,000 B	0	0	0
Mall Master Raceway Improvements	0	0	0	0	0	0
HVAC System	0	1,800 A2	0	0	0	0
6. ADVANCED PLANNING & INSPECTION						
No Projects Identified	0	0	0	0	0	0
	0	1,800	1,000	0	5,350	0

7. MAJOR CAPITAL RENEWAL	*FY'00*	*FY'01*	*FY'02*	*FY'03*	*FY'04*	*FY05*
No Projects Identified	0	0	0	0	0	0
	0	0	0	0	0	0

	FY'00	FY'01	FY'02	FY'03	FY'04	FY05
TOTAL FOR R&R PROGRAM	0	1,800	1,000	0	5,350	0

ALTERATIONS & MODIFICATIONS	*FY'00*	*FY'01*	*FY'02*	*FY'03*	*FY'04*	*FY05*
Collection Storage Improvements	0	0	500 B	500 B	500 B	0
	0	0	500	500	500	0

	FY'00	FY'01	FY'02	FY'03	FY'04	FY05
FACILITY TOTAL	0	1,800	1,500	500	5,850	0

Smithsonian Institution

Repair, Restoration and Alteration of Facilities Program - Five Year Plan

MUSEUM SUPPORT CENTER

REPAIR, RESTORATION AND ALTERATION OF FACILITIES PROGRAM

REPAIR AND RESTORATION	*FY'00*	*FY'01*	*FY'02*	*FY'03*	*FY'04*	*FY05*
1. GENERAL REPAIR						
Painting (957105)	0	0	0	175 C2	0	0
Service Road Repair & Striping	0	0	0	100 C2	0	500 C2
2. FACADE, ROOF & TERRACE REPAIR						
Clean & Recaulk Facade (997101)	0	0	400 C1	0	0	0
3. FIRE DETECTION & SUPPRESSION						
No Projects Identified	0	0	0	0	0	0
4. ACCESS, SAFETY & SECURITY						
Security System Upgrade	0	0	900 B3	0	0	0
5. UTILITY SYSTEM REPAIR						
Isolation Valves /Humidifier Replacement	0	0	100 B2	0	0	0
Boiler Tube Replacement	80 A2	0	0	0	0	0
Replace Transfer Switches	0	75 A2	0	0	0	0
Emergency Generator	0	0	0	0	250 C1	0
6. ADVANCED PLANNING & INSPECTION						
No Projects Identified	0	0	0	0	0	0
	80	75	1,400	275	250	500

7. MAJOR CAPITAL RENEWAL	*FY'00*	*FY'01*	*FY'02*	*FY'03*	*FY'04*	*FY05*
No Projects Identified	0	0	0	0	0	0
	0	0	0	0	0	0

	FY'00	FY'01	FY'02	FY'03	FY'04	FY05
TOTAL FOR R&R PROGRAM	80	75	1,400	275	250	500

ALTERATIONS & MODIFICATIONS	*FY'00*	*FY'01*	*FY'02*	*FY'03*	*FY'04*	*FY05*
Parking Lot Expansion	0	0	0	0	0	160 B1
	0	0	0	0	0	160

	FY'00	FY'01	FY'02	FY'03	FY'04	FY05
FACILITY TOTAL	80	75	1,400	275	250	660

Smithsonian Institution

Repair, Restoration and Alteration of Facilities Program - Five Year Plan

NATIONAL AIR & SPACE MUSEUM

REPAIR, RESTORATION AND ALTERATION OF FACILITIES PROGRAM

REPAIR AND RESTORATION	*FY'00*	*FY'01*	*FY'02*	*FY'03*	*FY'04*	*FY05*
1. GENERAL REPAIR						
General Repairs	75 B	75 B	75 B	75 B	75 B	75 B
Paint Loading Dock	0	0	0	0	250 C1	0
Replace Ceiling in Langley & Projection Booth	0	0	0	0	0	0
2. FACADE, ROOF & TERRACE REPAIR						
Skylight & Window Wall (923504)	750 A1	750 A1	0	0	0	0
3. FIRE DETECTION & SUPPRESSION						
Upgrade Restaurant Alarms	0	0	0	0	125 B2	0
Fire Alarm Repair	0	0	0	0	100 B3	0
4. ACCESS, SAFETY & SECURITY						
Accessible Egress Upgrade	0	0	0	0	250 B3	0
Additional Electronic Surveillance	0	0	0	0	0	250 D
Exhibit Alarming/CCTV	0	0	0	0	900 B2	0
Remove Plywood Flooring (983501)	0	0	0	0	0	0
5. UTILITY SYSTEM REPAIR						
Replace Dimmers in Theater	0	0	75 C1	0	0	0
6. ADVANCED PLANNING & INSPECTION						
No Projects Identified	0	0	0	0	0	0
	825	825	75	75	1,700	325

7. MAJOR CAPITAL RENEWAL	*FY'00*	*FY'01*	*FY'02*	*FY'03*	*FY'04*	*FY05*
Master Plan	0	0	0	0	500 B2	0
	0	0	0	0	500	0

TOTAL FOR R&R PROGRAM	FY'00	FY'01	FY'02	FY'03	FY'04	FY05
	825	825	75	75	2,200	325

ALTERATIONS & MODIFICATIONS	*FY'00*	*FY'01*	*FY'02*	*FY'03*	*FY'04*	*FY05*
No Projects Identified	0	0	0	0	0	0
	0	0	0	0	0	0

FACILITY TOTAL	FY'00	FY'01	FY'02	FY'03	FY'04	FY05
	825	825	75	75	2,200	325

Smithsonian Institution

Repair, Restoration and Alteration of Facilities Program - Five Year Plan

NMAI, GEORGE GUSTAV HEYE CENTER

REPAIR, RESTORATION AND ALTERATION OF FACILITIES PROGRAM

REPAIR AND RESTORATION	*FY'00*	*FY'01*	*FY'02*	*FY'03*	*FY'04*	*FY05*
1. GENERAL REPAIR						
No Projects Identified	0	0	0	0	0	0
2. FACADE, ROOF & TERRACE REPAIR						
No Projects Identified	0	0	0	0	0	0
3. FIRE DETECTION & SUPPRESSION						
No Projects Identified	0	0	0	0	0	0
4. ACCESS, SAFETY & SECURITY						
Women's Locker Room (982103)	80 C2	0	0	0	0	0
Gallery Lighting Mods (982103)	0	20 B3	0	0	0	0
Security Improvements (982103)	0	35 C2	0	0	0	0
Photo Studio Partition	0	50 C2	0	0	0	0
5. UTILITY SYSTEM REPAIR						
UCS Cable	150 B1	0	0	0	0	0
Acoustical Repair	25 B2	0	0	0	0	0
6. ADVANCED PLANNING & INSPECTION						
No Projects Identified	0	0	0	0	0	0
	255	105	0	0	0	0

7. MAJOR CAPITAL RENEWAL	*FY'00*	*FY'01*	*FY'02*	*FY'03*	*FY'04*	*FY05*
No Projects Identified	0	0	0	0	0	0
	0	0	0	0	0	0

	FY'00	FY'01	FY'02	FY'03	FY'04	FY05
TOTAL FOR R&R PROGRAM	**255**	**105**	**0**	**0**	**0**	**0**

ALTERATIONS & MODIFICATIONS	*FY'00*	*FY'01*	*FY'02*	*FY'03*	*FY'04*	*FY05*
Heye Center Pavilion Renderings & Signage	0	60 B2	0	0	0	0
	0	60	0	0	0	0

	FY'00	FY'01	FY'02	FY'03	FY'04	FY05
FACILITY TOTAL	**255**	**165**	**0**	**0**	**0**	**0**

Smithsonian Institution

Repair, Restoration and Alteration of Facilities Program - Five Year Plan

NATIONAL MUSEUM OF THE AMERICAN INDIAN

(includes Research Branch & Cultural Resource Center)

REPAIR, RESTORATION AND ALTERATION OF FACILITIES PROGRAM

REPAIR AND RESTORATION	*FY'00*	*FY'01*	*FY'02*	*FY'03*	*FY'04*	*FY05*
1. GENERAL REPAIR						
Research Branch General Repairs	50 B	60 B	60 B	60 B	60 B	60 B
CRC General Repairs	10 B	10 B	10 B	10 B	10 B	10 B
2. FACADE, ROOF & TERRACE REPAIR						
No Projects Identified	0	0	0	0	0	0
3. FIRE DETECTION & SUPPRESSION						
No Projects Identified	0	0	0	0	0	0
4. ACCESS, SAFETY & SECURITY						
CRC Fire Trail Stabilization	0	80 B3	0	0	0	0
5. UTILITY SYSTEM REPAIR						
Replace Liebert Units & Controls	70 B2	0	0	0	0	0
Mall Master Raceway (922307B)	125 C2	0	0	0	0	0
6. ADVANCED PLANNING & INSPECTION						
No Projects Identified	0	0	0	0	0	0
	255	150	70	70	70	70

7. MAJOR CAPITAL RENEWAL	*FY'00*	*FY'01*	*FY'02*	*FY'03*	*FY'04*	*FY05*
No Projects Identified	0	0	0	0	0	0
	0	0	0	0	0	0

	FY'00	FY'01	FY'02	FY'03	FY'04	FY05
TOTAL FOR R&R PROGRAM	255	150	70	70	70	70

ALTERATIONS & MODIFICATIONS	*FY'00*	*FY'01*	*FY'02*	*FY'03*	*FY'04*	*FY05*
No Projects Identified	0	0	0	0	0	0
	0	0	0	0	0	0

	FY'00	FY'01	FY'02	FY'03	FY'04	FY05
FACILITY TOTAL	255	150	70	70	70	70

Smithsonian Institution

Repair, Restoration and Alteration of Facilities Program - Five Year Plan

NATIONAL MUSEUM OF AMERICAN HISTORY

REPAIR, RESTORATION AND ALTERATION OF FACILITIES PROGRAM

REPAIR AND RESTORATION	*FY'00*	*FY'01*	*FY'02*	*FY'03*	*FY'04*	*FY05*
1. GENERAL REPAIR						
Landscape & Exterior Rehab	0	0	0	0	0	0
2. FACADE, ROOF & TERRACE REPAIR						
Roof Replacement (923003)	125 A1	0	0	0	0	0
Repair Ice Melt Equipment (943009)	0	0	0	0	0	900 B2
3. FIRE DETECTION & SUPPRESSION						
Fire Protection Master Plan (993006)	0	0	0	0	0	1,500 B3
4. ACCESS, SAFETY & SECURITY						
Railroad Hall Access (943008)	0	0	300 B3	0	0	0
Restroom Access & Repair (993010)	0	0	250 B3	0	0	600 B3
Exterior Doors & Handrails (923006)	800 A1	0	0	0	0	0
Security System Repair	0	0	0	0	0	900 B3
Exhibit Alarming/Card Access/CCTV	0	0	0	0	1,000 B3	0
Fullerton Security & Fire Protection (993002)	0	200 B3	0	0	0	0
Fountain Restoration (983016)	50 B1	0	0	0	0	0
Loading Dock Exhaust (993014)	50 A2	0	0	0	0	0
Fifth Floor Terrace Access (973003A)	0	0	0	0	0	150 B3
5. UTILITY SYSTEM REPAIR						
Backup Power Connection for Computer System	0	0	0	0	0	125 B2
Refurbish Cooling Tower (993008)	0	450 A2	0	0	0	0
HVAC Repair (993009 & 993013)	450 A2	0	0	0	0	0
Steam Distribution System Replacement (953019)	0	1,300 A2	0	0	0	0
High Voltage Vault Cooling (953019)	0	0	0	0	0	200 B3
6. ADVANCED PLANNING & INSPECTION						
No Projects Identified	0	0	0	0	0	0
	1,475	1,950	550	0	1,000	4,375

7. MAJOR CAPITAL RENEWAL	*FY'00*	*FY'01*	*FY'02*	*FY'03*	*FY'04*	*FY05*
No Projects Identified	0	0	0	0	0	0
	0	0	0	0	0	0

	FY'00	FY'01	FY'02	FY'03	FY'04	FY05
TOTAL FOR R&R PROGRAM	**1,475**	**1,950**	**550**	**0**	**1,000**	**4,375**

ALTERATIONS & MODIFICATIONS	*FY'00*	*FY'01*	*FY'02*	*FY'03*	*FY'04*	*FY05*
Music Hall&Office HVAC/Acoustic Improvements	300 B2	0	0	0	0	0
Exhibit Hall Demolition	0	300 B1	350 B1	400 B1	400 B1	350 B1
Catering Kitchen	0	0	170 B1	0	0	0
	300	300	520	400	400	350

	FY'00	FY'01	FY'02	FY'03	FY'04	FY05
FACILITY TOTAL	**1,775**	**2,250**	**1,070**	**400**	**1,400**	**4,725**

Smithsonian Institution

Repair, Restoration and Alteration of Facilities Program - Five Year Plan

NATIONAL MUSEUM OF NATURAL HISTORY

REPAIR, RESTORATION AND ALTERATION OF FACILITIES PROGRAM

REPAIR AND RESTORATION	*FY'00*	*FY'01*	*FY'02*	*FY'03*	*FY'04*	*FY05*
1. GENERAL REPAIR						
General Repair (983103)	0	50 B	50 B	50 B	50 B	50 B
2. FACADE, ROOF & TERRACE REPAIR						
West Loading Dock Doors (993120)	0	60 B2	0	0	0	0
3. FIRE DETECTION & SUPPRESSION						
Incorporated into MCR	0	0	0	0	0	0
4. ACCESS, SAFETY & SECURITY						
Elevators 19 & 20 (953131)	345 B2	0	0	0	0	0
West Loading Dock Lift	0	0	0	0	200 B2	0
Rotunda Mall Accessible Entrance (993119)	0	800 B3	0	0	0	0
Chemical Control Facility	0	0	0	0	0	995 A3
Exhibit Shop Exhaust Upgrade(993110)	0	150 B3	0	0	0	0
5. UTILITY SYSTEM REPAIR						
Incorporated into MCR	0	0	0	0	0	0
6. ADVANCED PLANNING & INSPECTION						
Rotunda Mall Accessible Entrance (993119)	100 B3	0	0	0	0	0
	445	1,060	50	50	250	1,045

7. MAJOR CAPITAL RENEWAL	*FY'00*	*FY'01*	*FY'02*	*FY'03*	*FY'04*	*FY05*
1. MASTER IMPLEMENTATION PLAN						
Master Plan Improvements & Interim Repairs	9,405 A2	9,355 A2	6,625 A2	6,520 A2	8,755 A2	10,825 A2
Mall Master Raceway (923118)	200 C2	300 C2	0	0	0	0
Design Costs, Master Plan & Interim Repairs	700 A2	1,000 A2	0	2,000 A2	0	3,000 A2
	10,305	10,655	6,625	8,520	8,755	13,825

	FY'00	FY'01	FY'02	FY'03	FY'04	FY05
TOTAL FOR R&R PROGRAM	10,750	11,715	6,675	8,570	9,005	14,870

ALTERATIONS & MODIFICATIONS	*FY'00*	*FY'01*	*FY'02*	*FY'03*	*FY'04*	*FY05*
Exhibit Hall Demolition	0	400 A	500 A	0	0	0
Space Modifications/Improvements	700 A	0	225 C	700 C	700 C	700 C
	700	400	725	700	700	700

	FY'00	FY'01	FY'02	FY'03	FY'04	FY05
FACILITY TOTAL	11,450	12,115	7,400	9,270	9,705	15,570

Smithsonian Institution

Repair, Restoration and Alteration of Facilities Program - Five Year Plan

NATIONAL ZOO, Rock Creek

REPAIR, RESTORATION AND ALTERATION OF FACILITIES PROGRAM

REPAIR AND RESTORATION	*FY'00*	*FY'01*	*FY'02*	*FY'03*	*FY'04*	*FY05*
1. GENERAL REPAIR						
Road Repairs & Erosion Control	60 B1	60 B1	60 B1	60 B1	60 B1	60 B1
Graphics, Exhibits & Glass Repair	210 B1	210 B1	210 B1	210 B1	210 B1	210 B1
Tree, Turf & Soil	145 B1	145 B1	145 B1	145 B1	145 B1	145 B1
Bio-Programs WO Exhibit Repair	40 A3	40 A3	40 A3	40 A3	40 A3	40 A3
Misc. General Repair & Painting	270 B1	270 B1	270 B1	270 B1	270 B1	270 B1
2. FACADE, ROOF & TERRACE REPAIR						
Multiple Roof Repair (inc. B. V. Keeper Bldg in 01)	50 A1	80 A1	50 A1	50 A1	50 A1	50 A1
Holt House Stabilization	50 A1	0	0	0	0	0
Upper Bear Roof Stabilization	75 A1	300 A1	0	0	0	0
GSPB Structural Repairs	50 A1	0	200 B1	0	0	0
Lion/Tiger Moat & Planter Waterproofing	0	0	0	150 A1	200 A1	900 A1
Small Mammal Skylight Reglazing	0	0	0	0	0	0
3. FIRE DETECTION & SUPPRESSION						
Fire Alarms & Sprinklers	90 A3	90 A3	100 A3	100 A3	90 A3	90 A3
Fire Protection Improvements	50 A3	350 A3	350 A3	350 A3	350 A3	350 A3
4. ACCESS, SAFETY & SECURITY						
Accessibility Improvements	100 A3	200 A3	100 A3	100 A3	100 A3	100 A3
Renovate Auditorium & Seating for ADA	0	140 A3	0	0	0	0
Asbestos Abatement	50 B3	50 B3	50 B3	50 B3	50 B3	50 B3
Door, Cage, Glass & Fence Repair & Replacement	140 A2	340 A2	475 A2	340 A2	340 A2	340 A2
Amazonia: Replace Railings	50 B2	50 B2	200 B2	0	0	0
Bird House Bulk Food Storage/Dead End Corridor	30 B3	50 B3	0	0	0	0
Safety Improvements	20 A3	20 A3	20 A3	20 A3	20 A3	20 A3
Security System Improvements	85 B3	85 B3	85 B3	85 B3	85 B3	85 B3
5. UTILITY SYSTEM REPAIR						
Amazonia Filter	10 A2	10 A2	10 A2	10 A2	15 A2	15 A2
Fiber Optic/Comm. Infrastructure	25 B1	25 B1	25 B1	20 B1	25 B1	25 B1
Generator Upgrades & Elec. Improvements	20 A2	20 A2	20 A2	20 A2	20 A2	20 A2
HVAC Repair and Improvements	680 A2	680 A2	910 A2	910 A2	910 A2	910 A2
Irrigation & Sewer System Maintenance	50 B1	50 B1	55 B1	55 B1	55 B1	55 B1
Relamping	10 A2	10 A2	10 A2	10 A2	10 A2	10 A2
Zoo Wide Pool Repairs	300 B1	100 B1	100 B1	100 B1	100 B1	100 B1
Small Mammals HVAC Improvements	100 B1	0	0	500 B1	0	0
Utility Infrastructure Improvements	700 B1	700 B1	1,000 B1	1,600 B1	1,600 B1	1,600 B1
6. ADVANCED PLANNING & INSPECTION						
No Projects Identified	0	0	0	0	0	0
	3,460	4,075	4,485	5,195	4,745	5,445

7. MAJOR CAPITAL RENEWAL	*FY'00*	*FY'01*	*FY'02*	*FY'03*	*FY'04*	*FY05*
Road and Bridge Repairs	110 B1	200 B1	1,000 B1	1,000 B1	350 B1	350 B1
Mane Building Renovation	400 A1	1,700 A1	0	0	0	0
Bear Habitat Renovation (upper)	300 A1	1,000 A1	1,000 A1	1,500 A1	2,600 A1	2,600 A1
Deer & Tapir Buildings	0	100 A1	0	0	0	0
Australia Building Structural Repair	90 A1	175 A1	0	0	0	0
Elephant House Renovation	0	350 B1	1,000 B1	0	0	0
	900	3,525	3,000	2,500	2,950	2,950

	FY'00	**FY'01**	**FY'02**	**FY'03**	**FY'04**	**FY05**
TOTAL FOR R&R PROGRAM	**4,360**	**7,600**	**7,485**	**7,695**	**7,695**	**8,395**

ALTERATIONS & MODIFICATIONS	*FY'00*	*FY'01*	*FY'02*	*FY'03*	*FY'04*	*FY05*
Staff Office Improvements	0	0	100 B1	100 B1	100 B1	100 B1
Exhibit Space Renovations	0	100 A	250 A	250 A	250 A	250 A
	0	100	350	350	350	350

	FY'00	**FY'01**	**FY'02**	**FY'03**	**FY'04**	**FY05**
FACILITY TOTAL	4,360	7,700	7,835	8,045	8,045	8,745

Smithsonian Institution

Repair, Restoration and Alteration of Facilities Program - Five Year Plan

NATIONAL ZOO, Front Royal

REPAIR, RESTORATION AND ALTERATION OF FACILITIES PROGRAM

REPAIR AND RESTORATION	*FY'00*	*FY'01*	*FY'02*	*FY'03*	*FY'04*	*FY05*
1. GENERAL REPAIR						
Painting	10 B1	10 B1	10 B1	50 B1	50 B1	50 B1
Repair Shops	0	300 A2	300 A2	300 A2	300 A2	300 A2
Road Repair & Signage	7 B1	7 B1	10 B1	15 B1	15 B1	15 B1
Tree & Turf	30 B1	30 B1	30 B1	40 B1	40 B1	40 B1
Work Order Support	115 A2	125 A2	125 A2	125 A2	125 A2	125 A2
Replace Locks	0	50 B3	0	0	0	0
Admin Annex	0	0	0	160 B1	400 B1	0
Renovate Building 64 - Horse Barn	0	0	0	60 A1	400 A1	0
Emergency Repairs	175 A2	175 A2	175 A2	175 A2	175 A2	175 A2
Renovate Building 142 - Stallion Barn Storage	0	0	0	0	0	110 A1
Historic Site Assessment	0	0	0	0	0	0
2. FACADE, ROOF & TERRACE REPAIR						
Roof Repair	25 A1	25 A1	25 A1	50 A1	50 A1	50 A1
Window Replacement Program	25 B1	25 B1	25 B1	85 B1	85 B1	85 B1
Roof: Mule stable, Sm. An. Rivinus Barn, Res. 50	0	150 A1	150 A1	0	0	0
Roof: Slate Hill & Waller Barns	0	0	0	100 A1	50 A1	50 A1
Structural Repairs @ Hospital	43 A1	0	0	0	0	0
3. FIRE DETECTION & SUPPRESSION						
Fire Alarms & Sprinklers	35 A3	35 A3	35 A3	60 A3	70 A3	70 A3
Fire Protection Improvements	0	250 B3	250 B3	100 B3	250 B3	250 B3
Front Royal Dorm & Conf. Ctr. Sprinklers	50 A3	0	0	150	0	0
Maintenance Facilities Code Improvements	550 A3	0	0	0	0	0
4. ACCESS, SAFETY & SECURITY						
Accessibility Improvements	10 A3	10 A3	10 A3	150 A3	150 A3	150 A3
Asbestos & Lead Abatement	25 B3	25 B3	25 B3	50 B3	50 B3	50 B3
Fence, Gate, Railing & Glass Repair	15 A2	18 A2	20 A2	20 A2	20 A2	20 A2
5. UTILITY SYSTEM REPAIR						
Communications	15 B2	15 B2	15 B2	15 B2	15 B2	15 B2
Boilers - Annual Replacement	10 A2	10 A2	10 A2	10 A2	10 A2	10 A2
Electrical Improvements	30 A2	30 A2	30 A2	30 A2	30 A2	30 A2
High Voltage Testing	10 C1	0	10 C1	0	10 C1	0
Renovate Main Water Reservoir	0	0	50 B2	250 B2	0	0
Sewer/Storm Drain	10 B1	10 B1	10 B1	10 B1	10 B1	10 B1
Utility Upgrades	450 B1	0	0	0	0	0
6. ADVANCED PLANNING & INSPECTION						
No Projects Identified	0	0	0	0	0	0
	1,640	1,300	1,315	2,005	2,305	1,605

7. MAJOR CAPITAL RENEWAL	*FY'00*	*FY'01*	*FY'02*	*FY'03*	*FY'04*	*FY05*
Consolidated Maintenance Facility	0	1,100 A1	1,200 A1	300 A1	0	0
	0	1,100	1,200	300	0	0

	FY'00	FY'01	FY'02	FY'03	FY'04	FY05
TOTAL FOR R&R PROGRAM	1,640	2,400	2,515	2,305	2,305	1,605

ALTERATIONS & MODIFICATIONS	*FY'00*	*FY'01*	*FY'02*	*FY'03*	*FY'04*	*FY05*
No Projects Identified	0	0	0	0	0	0
	0	0	0	0	0	0

	FY'00	FY'01	FY'02	FY'03	FY'04	FY05
FACILITY TOTAL	1,640	2,400	2,515	2,305	2,305	1,605

Smithsonian Institution

Repair, Restoration and Alteration of Facilities Program - Five Year Plan

PATENT OFFICE BUILDING

(includes National Museum of American Art, National Portrait Gallery, and Archives of American Art)

REPAIR, RESTORATION AND ALTERATION OF FACILITIES PROGRAM

REPAIR AND RESTORATION	*FY'00*	*FY'01*	*FY'02*	*FY'03*	*FY'04*	*FY05*
1. GENERAL REPAIR						
No Projects Identified	0	0	0	0	0	0
2. FACADE, ROOF & TERRACE REPAIR						
No Projects Identified	0	0	0	0	0	0
3. FIRE DETECTION & SUPPRESSION						
No Projects Identified	0	0	0	0	0	0
4. ACCESS, SAFETY & SECURITY						
No Projects Identified	0	0	0	0	0	0
5. UTILITY SYSTEM REPAIR						
No Projects Identified	0	0	0	0	0	0
6. ADVANCED PLANNING & INSPECTION						
No Projects Identified	0	0	0	0	0	0
	0	0	0	0	0	0

7. MAJOR CAPITAL RENEWAL	*FY'00*	*FY'01*	*FY'02*	*FY'03*	*FY'04*	*FY05*
Physical Plant Renewal	8,000 A1	17,000 A1	17,000 A1	18,000 A1	0	0
	8,000	17,000	17,000	18,000	0	0

	FY'00	FY'01	FY'02	FY'03	FY'04	FY05
TOTAL FOR R&R PROGRAM	**8,000**	**17,000**	**17,000**	**18,000**	**0**	**0**

ALTERATIONS & MODIFICATIONS	*FY'00*	*FY'01*	*FY'02*	*FY'03*	*FY'04*	*FY05*
No Projects Identified	0	0	0	0	0	0
	0	0	0	0	0	0

	FY'00	FY'01	FY'02	FY'03	FY'04	FY'05
FACILITY TOTAL	**8,000**	**17,000**	**17,000**	**18,000**	**0**	**0**

Smithsonian Institution

Repair, Restoration and Alteration of Facilities Program - Five Year Plan

QUADRANGLE

. (includes Arthur M. Sackler Gallery, National Museum of African Art,
. S. Dillon Ripley Center)

REPAIR, RESTORATION AND ALTERATION OF FACILITIES PROGRAM

REPAIR AND RESTORATION	*FY'00*	*FY'01*	*FY'02*	*FY'03*	*FY'04*	*FY05*
1. GENERAL REPAIR						
Misc. General Repair	50 B	50 B	50 B	50 B	50 B	50 B
Ripley Water Damage Repair (996302)	75 A1	0	0	0	0	0
2. FACADE, ROOF & TERRACE REPAIR						
African Art 3rd Level Leak Repair (986306)	0	250 B1	0	0	0	0
Roof Replacement (976309)	0	0	0	0	0	500 C1
Haupt/Sackler Fountain Repair	0	0	0	0	0	300 C1
Ripley Loading Dock Repair (976309B)	300 A1	0	0	0	0	0
Loading Dock Door & Gate (986307)	0	0	350 B3	0	0	0
3. FIRE DETECTION & SUPPRESSION						
No Projects Identified	0	0	0	0	0	0
4. ACCESS, SAFETY & SECURITY						
Life Safety/Interior Door Security (866370)	0	0	600 B3	0	0	0
Card Access/Intrusion Detection	0	0	0	0	0	0
Gallery Emergency Lighting & Exiting (996303)	50 A2	0	0	0	0	0
NMAA Courtyard Access (926317)	0	0	0	0	0	0
5. UTILITY SYSTEM REPAIR						
Steam Humidification Replacement	0	0	0	0	0	500 A2
6. ADVANCED PLANNING & INSPECTION						
No Projects Identified	0	0	0	0	0	0
	475	300	1,000	50	50	1,350

7. MAJOR CAPITAL RENEWAL	*FY'00*	*FY'01*	*FY'02*	*FY'03*	*FY'04*	*FY05*
No Projects Identified	0	0	0	0	0	0
	0	0	0	0	0	0

	FY'00	FY'01	FY'02	FY'03	FY'04	FY05
TOTAL FOR R&R PROGRAM	475	300	1,000	50	50	1,350

ALTERATIONS & MODIFICATIONS	*FY'00*	*FY'01*	*FY'02*	*FY'03*	*FY'04*	*FY05*
SITES Space Modifications (986315)	150 A	0	0	0	0	0
AMSG Scholars' Offices	0	0	125 A	0	0	0
NMAFA Coat Room Modifications	0	0	0	0	100 C	0
	150	0	125	0	100	0

	FY'00	FY'01	FY'02	FY'03	FY'04	FY05
FACILITY TOTAL	625	300	1,125	50	150	1,350

Smithsonian Institution

Repair, Restoration and Alteration of Facilities Program - Five Year Plan

RENWICK GALLERY

REPAIR, RESTORATION AND ALTERATION OF FACILITIES PROGRAM

REPAIR AND RESTORATION	*FY'00*	*FY'01*	*FY'02*	*FY'03*	*FY'04*	*FY'05*
1. GENERAL REPAIR						
Interior Repairs	100 B2	50 B2	100 B2	0	0	0
2. FACADE, ROOF & TERRACE REPAIR						
Exterior Repair	0	300 A1	0	0	0	0
3. FIRE DETECTION & SUPPRESSION						
No Projects Identified	0	0	0	0	0	0
4. ACCESS, SAFETY & SECURITY						
Disabled Entrance Access (983602)	0	0	800 A3	0	0	0
Exterior Lighting (983602)	0	0	250 A2	0	0	0
5. UTILITY SYSTEM REPAIR						
Grand Stair Lighting	75 A1	0	0	0	0	0
Grand Salon Lighting	400 A2	0	0	0	0	0
6. ADVANCED PLANNING & INSPECTION						
No Projects Identified	0	0	0	0	0	0
	575	350	1,150	0	0	0

7. MAJOR CAPITAL RENEWAL	*FY'00*	*FY'01*	*FY'02*	*FY'03* 0	*FY'04*	*FY'05*
Master Plan	0	0	250 B1	0	0	0
	0	0	250	0	0	0

	FY'00	FY'01	FY'02	FY'03	FY'04	FY'05
TOTAL FOR R&R PROGRAM	**575**	**350**	**1,400**	**0**	**0**	**0**

ALTERATIONS & MODIFICATIONS	*FY'00*	*FY'01*	*FY'02*	*FY'03*	*FY'04*	*FY'05*
No Projects Identified	0	0	0	0	0	0
	0	0	0	0	0	0

	FY'00	FY'01	FY'02	FY'03	FY'04	FY'05
FACILITY TOTAL	**575**	**350**	**1,400**	**0**	**0**	**0**

Smithsonian Institution

Repair, Restoration and Alteration of Facilities Program - Five Year Plan

SILVER HILL FACILITY

REPAIR, RESTORATION AND ALTERATION OF FACILITIES PROGRAM

REPAIR AND RESTORATION	*FY'00*	*FY'01*	*FY'02*	*FY'03*	*FY'04*	*FY05*
1. GENERAL REPAIR						
General Repairs	250 B	250 B	250 B	250 B	250 B	250 B
Building 17 (963807)	500 A1	0	0	0	0	0
2. FACADE, ROOF & TERRACE REPAIR						
Building 10 Roof Repair (983802)	0	500 A1	0	0	0	0
3. FIRE DETECTION & SUPPRESSION						
No Projects Identified	0	0	0	0	0	0
4. ACCESS, SAFETY & SECURITY						
Buildings 14 & 15 Safety/Security	0	0	120 C1	0	0	0
Building 17 (NMAH) (963807)	150 A1	0	0	0	0	0
Asbestos Encap. Bldgs. 15, 16, &18	0	0	0	300 B3	300 B3	300 B3
Asbestos Monitoring	0	0	0	150 B3	150 B3	150 B3
5. UTILITY SYSTEM REPAIR						
Environmental Improvements, Bldgs... 15/16	0	0	0	0	300 B2	0
Replace HVAC Equip. 18	25 B2	0	0	0	0	0
Electrical Upgrade & Environmental Control	0	0	0	0	0	500 B2
6. ADVANCED PLANNING & INSPECTION						
No Projects Identified	0	0	0	0	0	0
	925	750	370	700	1,000	1,200

7. MAJOR CAPITAL RENEWAL	*FY'00*	*FY'01*	*FY'02*	*FY'03*	*FY'04*	*FY05*
No Projects Identified	0	0	0	0	0	0
	0	0	0	0	0	0

	FY'00	FY'01	FY'02	FY'03	FY'04	FY05
TOTAL FOR R&R PROGRAM	925	750	370	700	1,000	1,200

ALTERATIONS & MODIFICATIONS	*FY'00*	*FY'01*	*FY'02*	*FY'03*	*FY'04*	*FY05*
No Projects Identified	0	0	0	0	0	0
	0	0	0	0	0	0

	FY'00	FY'01	FY'02	FY'03	FY'04	FY05
FACILITY TOTAL	925	750	370	700	1,000	1,200

Smithsonian Institution

Repair, Restoration and Alteration of Facilities Program - Five Year Plan

SMITHSONIAN ASTROPHYSICAL OBSERVATORY

REPAIR, RESTORATION AND ALTERATION OF FACILITIES PROGRAM

REPAIR AND RESTORATION	*FY'00*	*FY'01*	*FY'02*	*FY'03*	*FY'04*	*FY05*
1. GENERAL REPAIR						
General Repairs, All Locations (985102)	110 B	125 B	140 B	150 B	150 B	200 B
Whipple Road Repair & Improvement (915103a)	0	500 B1	0	0	1,000 B1	0
Replace Heated Road Elements (915103a)	150 A2	0	0	0	0	0
2. FACADE, ROOF & TERRACE REPAIR						
Paint Exterior MMT (985103)	0	50 B1	0	0	0	0
Replace Commons Building Deck	0	0	60 B1	0	0	0
3. FIRE DETECTION & SUPPRESSION						
Fire Detection System Upgrade	0	0	0	150 B3	0	0
Sprinkler System Summit Dorm	0	0	0	150 B3	0	0
FP Improvements SMA Control Bldg	0	0	0	100 B3	0	0
4. ACCESS, SAFETY & SECURITY						
No Projects Identified	0	0	0	0	0	0
5. UTILITY SYSTEM REPAIR						
Emergency Generator Computer Facility	100 A2	0	0	0	0	0
Water System Improvements	170 B2	0	200 B2	0	0	375 B2
Replace FM Repeater	0	0	0	0	60 B2	0
Base Camp Microwave Link	0	0	0	0	150 B2	0
6. ADVANCED PLANNING & INSPECTION						
No Projects Identified	0	0	0	0	0	0
	530	675	400	550	1,360	575

7. MAJOR CAPITAL RENEWAL	*FY'00*	*FY'01*	*FY'02*	*FY'03*	*FY'04*	*FY05*
No Projects Identified	0	0	0	0	0	0
	0	0	0	0	0	0

	FY'00	FY'01	FY'02	FY'03	FY'04	FY05
TOTAL FOR R&R PROGRAM	**530**	**675**	**400**	**550**	**1,360**	**575**

ALTERATIONS & MODIFICATIONS	*FY'00*	*FY'01*	*FY'02*	*FY'03*	*FY'04*	*FY05*
MMT Building Modifications, Phases 3 (975107)	0	0	400 B2	0	0	0
Dorm Extension, Phases A and B (975108)	0	350 B1	400 B1	0	0	0
SMA Control Building Extension	0	0	0	500 B1	0	0
Knoll Two Telescope Facility	0	0	0	0	0	800 C
Central Building Remodeling, Oak Ridge	0	0	0	0	350 C	0
Technology Upgrades	0	0	100 B	100 B	100 B	100 B
Knoll 1 Facility	0	0	0	0	0	200 C
	0	350	900	600	450	1,100

	FY'00	FY'01	FY'02	FY'03	FY'04	FY05
FACILITY TOTAL	**530**	**1,025**	**1,300**	**1,150**	**1,810**	**1,675**

Smithsonian Institution

Repair, Restoration and Alteration of Facilities Program - Five Year Plan

SMITHSONIAN ENVIRONMENTAL RESEARCH CENTER

REPAIR, RESTORATION AND ALTERATION OF FACILITIES PROGRAM

REPAIR AND RESTORATION	*FY'00*	*FY'01*	*FY'02*	*FY'03*	*FY'04*	*FY05*
1. GENERAL REPAIR						
General Repairs	150 B	150 B	150 B	150 B	250 B	250 B
Road Repairs & Paving (904409B)	0	0	125 B1	0	0	500 C1
Paint & Repair Water Tower ((FY05+)	0	0	0	0	0	80 C1
Cory Building Rehab	0	600 A2	0	0	0	0
2. FACADE, ROOF & TERRACE REPAIR						
Small Bldg. Roof Repairs	0	0	0	0	50 C1	0
3. FIRE DETECTION & SUPRESSION						
No Projects Identified	0	0	0	0	0	0
4. ACCESS, SAFETY & SECURITY						
Accessibility Improvements (974403)	0	0	50 B3	50 B3	0	200 B3
Security Lighting Improvements (984404)	0	0	100 B3	0	0	0
Security & Telecommunications System Upgrade	0	0	0	0	300 B2	0
Chemical Storage Building Addition	0	0	0	0	0	150 B2
5. UTILITY SYSTEM REPAIR						
Replace Fans & Plumbing, Building 100	0	0	0	0	150 B2	0
Sanitary Sewer Repair	500 A3	0	0	0	0	0
Utility Connection to Waterfront	0	0	300 B2	0	0	0
HVAC System Upgrade, Bldgs. 500 & 100	0	0	0	0	0	80 C2
6. ADVANCED PLANNING & INSPECTION						
No Projects Identified	0	0	0	0	0	0
	650	750	725	200	750	1,260

7. MAJOR CAPITAL RENEWAL	*FY'00*	*FY'01*	*FY'02*	*FY'03*	*FY'04*	*FY05*
No projects Identified	0	0	0	0	0	0
	0	0	0	0	0	0

	FY'00	FY'01	FY'02	FY'03	FY'04	FY05
TOTAL R&R PROGRAM	650	750	725	200	750	1,260

ALTERATIONS & MODIFICATIONS	*FY'00*	*FY'01*	*FY'02*	*FY'03*	*FY'04*	*FY05*
Stormwater Mgt.(944408)/Approach Road (964404)	900 A	0	0	0	0	0
Visiting Scientist Housing	0	400 A	600 A	0	0	0
Lab Modules, Phase 5 (1) (974404)	0	350 A	0	0	0	0
Dormitory Expansion	0	0	0	500 B	0	0
Addition to Wet Laboratory (1) (974408)	0	0	500 B	0	0	0
Boat Storage Building (IIA) (974409)	0	0	0	500 C	0	0
Building #300 Renovation (IIA)	0	0	0	0	0	300 B
Facilities Maintenance Building (IIB)	0	0	0	0	900 B	0
Greenhouse (IIB)	0	0	0	600 B	0	0
	900	750	1,100	1,600	900	300

	FY'00	FY'01	FY'02	FY'03	FY'04	FY05
FACILITY TOTAL	1,550	1,500	1,825	1,800	1,650	1,560

Smithsonian Institution

Repair, Restoration and Alteration of Facilities Program - Five Year Plan

SMITHSONIAN INSTITUTION BUILDING (Castle)

REPAIR, RESTORATION AND ALTERATION OF FACILITIES PROGRAM

REPAIR AND RESTORATION	*FY'00*	*FY'01*	*FY'02*	*FY'03*	*FY'04*	*FY05*
1. GENERAL REPAIR						
Miscellaneous Repairs (983202)	50 B2	50 B2	50 B2	50 B2	50 B2	50 B2
2. FACADE, ROOF & TERRACE REPAIR						
Paint Exterior Windows	445 B1	0	0	0	0	0
3. FIRE DETECTION & SUPPRESSION						
No Projects Identified	0	0	0	0	0	0
4. ACCESS, SAFETY & SECURITY						
No Projects Identified	0	0	0	0	0	0
5. UTILITY SYSTEM REPAIR						
No Projects Identified	0	0	0	0	0	0
6. ADVANCED PLANNING & INSPECTION						
No Projects Identified	0	0	0	0	0	0
	495	50	50	50	50	50

7. MAJOR CAPITAL RENEWAL	*FY'00*	*FY'01*	*FY'02*	*FY'03*	*FY'04*	*FY05*
Master Plan Concept	500 B2	0	0	0	0	0
Design Costs	0	0	0	2,000 B2	2,000 B2	0
Construction	0	0	0	0	0	0
	500	0	0	2,000	2,000	0

	FY'00	**FY'01**	**FY'02**	**FY'03**	**FY'04**	**FY05**
TOTAL R&R PROGRAM	**995**	**50**	**50**	**2,050**	**2,050**	**50**

ALTERATIONS & MODIFICATIONS	*FY'00*	*FY'01*	*FY'02*	*FY'03*	*FY'04*	*FY05*
SIB/AIB Miscellaneous Space Modifications	100 B2	100 B2	100 B2	100 B2	100 B2	100 B2
	100	100	100	100	100	100

	FY'00	**FY'01**	**FY'02**	**FY'03**	**FY'04**	**FY05**
FACILITY TOTAL	**1,095**	**150**	**150**	**2,150**	**2,150**	**150**

Smithsonian Institution

Repair, Restoration and Alteration of Facilities Program - Five Year Plan

SMITHSONIAN TROPICAL RESEARCH INSTITUTE

REPAIR, RESTORATION AND ALTERATION OF FACILITIES PROGRAM

REPAIR AND RESTORATION	*FY'00*	*FY'01*	*FY'02*	*FY'03*	*FY'04*	*FY05*
1. GENERAL REPAIR						
General Repairs/Painting	150 B	150 B	185 B	185 B	185 B	185 B
Ancon Road Repair	90 B3	0	0	0	0	0
BCI Sheet Piling Repairs/Replacement	235 B1	0	0	0	0	0
Tivoli Repair	0	0	1,600 B2	0	0	0
Naos Facilities Repairs	0	0	80 B3	0	0	0
Gamboa Interior Repairs	0	0	20 B3	0	0	0
Ancon Interior Repairs	0	0	20 B3	0	0	0
BCI Facility Improvements	0	0	150 A2	0	0	0
Haskins Bldg. Renovation, BCI	0	0	0	0	125 C2	0
2. FACADE, ROOF & TERRACE REPAIR						
Tupper Facade & Roof Repair	0	0	0	275 B3	0	540 B3
Naos Facade & Roof Repair	0	0	0	180 B3	0	0
Ancon/Culebra Exterior Repair	0	0	0	65 B3	0	0
BCI Exterior Repair	0	0	0	0	445 B2	0
3. FIRE DETECTION & SUPPRESSION						
No Projects Identified	0	0	0	0	0	0
4. ACCESS, SAFETY & SECURITY						
Disabled Access, Gamboa/BCI/Boat	0	100 B3	0	0	0	0
BCI Access & Safety	0	35 B3	0	20 B3	0	0
Naos Accessibility & Facade Improvements	0	300 A	0	0	0	0
Tupper/Tivoli/Naos Repairs	0	0	0	30 B3	0	0
Security Improvements	500 B3	0	0	0	0	0
5. UTILITY SYSTEM REPAIR						
Repair/Replace 356 Naos A/C System	0	125 B1	0	0	0	0
Water System Improvements	0	170 B2	0	0	0	0
Emergency Generator Computer Facility	30 A1	0	0	0	0	0
Tupper/Tivoli Elec/HVAC	0	0	315 B3	0	0	0
BCI Utility System Repair	0	0	0	0	250 B1	0
Naos/Gamboa/Culebra/Ancon	0	0	0	135 B3	0	0
Communications	0	0	0	70 B2	210 B2	0
6. ADVANCED PLANNING & INSPECTION						
No Projects Identified	0	0	0	0	0	0
	1,005	880	2,370	960	1,215	725

7. MAJOR CAPITAL RENEWAL	*FY'00*	*FY'01*	*FY'02*	*FY'03*	*FY'04*	*FY05*
No Projects Identified	0	0	0	0	0	0

	FY'00	FY'01	FY'02	FY'03	FY'04	FY05
TOTAL FOR R&R PROGRAM	1,005	880	2,370	960	1,215	725

ALTERATIONS & MODIFICATIONS	*FY'00*	*FY'01*	*FY'02*	*FY'03*	*FY'04*	*FY05*
Staff Housing - BCI (935004)	500 A	0	0	0	0	0
Game Warden Facilities	0	0	0	0	100 D	0
Aquarium Building Renovation - Naos	0	0	0	450 A	0	0
Gigante Facility Upgrade	0	0	0	300 B	0	0
BCI Small Boat Haul Out	0	0	125 B	0	0	0
Visitors Center - Tivoli	0	0	0	0	170 C	0
Arboretum - Tivoli	0	0	0	0	230 C	0
Pipeline Road Improvements	0	0	0	0	300 C	0
BCI Old Herbarium	0	0	0	0	0	125 C
	500	0	125	750	800	125

	FY'00	FY'01	FY'02	FY'03	FY'04	FY05
FACILITY TOTAL	1,505	880	2,495	1,710	2,015	850

Smithsonian Institution

Repair, Restoration and Alteration of Facilities Program - Five Year Plan

MULTIPLE SITE PROJECTS

REPAIR, RESTORATION AND ALTERATION OF FACILITIES PROGRAM

REPAIR AND RESTORATION	*FY'00*	*FY'01*	*FY'02*	*FY'03*	*FY'04*	*FY05*
1. GENERAL REPAIR						
Personnel, Reprographics and Library (947502A & 969901)	600 A	600 A	600 A	600 A	600 A	600 A
Craft Services, All Facilities (989901)	1,500 B	1,500 B	1,500 B	1,500 B	1,500 B	1,500 B
Structural Engineering, All Facilities	60 A	60 A	60 A	60 A	60 A	60 A
General Repairs, All Facilities	1,500 B	1,600 B	905 B	1,500 B	1,500 B	1,250 B
2. FACADE, ROOF & TERRACE REPAIR						
No Projects Identified	0	0	0	0	0	0
3. FIRE DETECTION & SUPPRESSION						
No Projects Identified	0	0	0	0	0	0
4. ACCESS, SAFETY & SECURITY						
Asbestos Abatement, all locations	250 B2	250 B2	250 B2	250 B2	250 B2	250 B2
Asbestos Monitoring, all locations	200 B2	200 B2	200 B2	200 B2	200 B2	200 B2
Lead Abatement, all locations	250 B2	250 B2	250 B2	250 B2	250 B2	250 B2
Escalator/Elevator Safety Improvements (977002)	250 B3	500 B3	0	0	0	0
Guard Services, All Locations (989902)	500 A	500 A	500 A	500 A	500 A	500 A
5. UTILITY SYSTEM REPAIR						
Misc. Utility Repair	500 B3	500 B3	500 B3	500 B3	500 B3	500 B3
6. ADVANCED PLANNING & INSPECTION						
Advance Planning & Design Funds	1,900 B	2,000 B	2,000 B	2,000 B	2,000 B	2,000 B
	7,510	7,960	6,765	7,360	7,360	7,110

7. MAJOR CAPITAL RENEWAL	*FY'00*	*FY'01*	*FY'02*	*FY'03*	*FY'04*	*FY05*
No Projects Identified	0	0	0	0	0	0
	0	0	0	0	0	0

	FY'00	FY'01	FY'02	FY'03	FY'04	FY05
TOTAL FOR R&R PROGRAM	**7,510**	**7,960**	**6,765**	**7,360**	**7,360**	**7,110**

ALTERATIONS & MODIFICATIONS	*FY'00*	*FY'01*	*FY'02*	*FY'03*	*FY'04*	*FY05*
A&M Planning & Design	350 A	430 A	555 A	475 A	1,175 A	1,740 A
SIL: Library Modifications, Various Sites	0	400 B	0	525 B	525 B	525 B
OEC: Space Renovation @ SISC	0	60 B	0	0	0	0
	350	890	555	1,000	1,700	2,265

	FY'00	FY'01	FY'02	FY'03	FY'04	FY05
TOTAL	**7,860**	**8,850**	**7,320**	**8,360**	**9,060**	**9,375**

Smithsonian Institution

Repair, Restoration and Alteration of Facilities Program - Five Year Plan

Program Summary By Facility

($ in 000s)

	FY'00	FY'01	FY'02	FY'03	FY'04	FY05
Anacostia Museum						
MAJOR CAPITAL RENEWAL	0	0	0	0	0	0
Other Repair and Restoration	0	60	60	60	60	210
Arts and Industires Building						
MAJOR CAPITAL RENEWAL	4,500	2,000	9,620	11,000	17,500	16,700
Other Repair and Restoration	0	0	0	0	0	0
Cooper Hewitt, National Design Museum						
MAJOR CAPITAL RENEWAL	0	0	0	0	0	0
Other Repair and Restoration	50	1,685	410	60	410	60
Freer Gallery of Art						
MAJOR CAPITAL RENEWAL	0	0	0	0	0	0
Other Repair and Restoration	45	170	60	20	370	620
Hirshhorn Museum and Sculpture Garden						
MAJOR CAPITAL RENEWAL	0	0	0	0	0	0
Other Repair and Restoration	0	1,800	1,000	0	5,350	0
Museum Support Center						
MAJOR CAPITAL RENEWAL	0	0	0	0	0	0
Other Repair and Restoration	80	75	1,400	275	250	500
National Air and Space Museum						
MAJOR CAPITAL RENEWAL	0	0	0	0	500	0
Other Repair and Restoration	825	825	75	75	1,700	325
National Museum of the American Indian George Gustav Heye Center						
MAJOR CAPITAL RENEWAL	0	0	0	0	0	0
Other Repair and Restoration	255	105	0	0	0	0
National Museum of the American Indian Research Br. & Cultural Resources Ctr.						
MAJOR CAPITAL RENEWAL	0	0	0	0	0	0
Other Repair and Restoration	255	150	70	70	70	70
National Museum of American History						
MAJOR CAPITAL RENEWAL	0	0	0	0	0	0
Other Repair and Restoration	1,475	1,950	550	0	1,000	4,375
National Museum of Natural History						
MAJOR CAPITAL RENEWAL	10,305	10,655	6,625	8,520	8,755	13,825
Other Repair and Restoration	445	1,060	50	50	250	1,045
National Zoological Park						
MAJOR CAPITAL RENEWAL	900	4,625	4,200	2,800	2,950	2,950
Other Repair and Restoration	5,100	5,375	5,800	7,200	7,050	7,050

Smithsonian Institution

Repair, Restoration and Alteration of Facilities Program - Five Year Plan

	($ in 000s)					
	FY'00	*FY'01*	*FY'02*	*FY'03*	*FY'04*	*FY05*
Patent Office Building						
National Museum of American Art, National Portrait Gallery, Archives of American Art						
MAJOR CAPITAL RENEWAL	8,000	17,000	17,000	18,000	0	0
Other Repair and Restoration	0	0	0	0	0	0
Quadrangle Building						
Arthur M. Sackler Gallery, National Museum of African Art, S. Dillon Ripley Center						
MAJOR CAPITAL RENEWAL	0	0	0	0	0	0
Other Repair and Restoration	475	300	1,000	50	50	1,350
Renwick Gallery						
MAJOR CAPITAL RENEWAL	0	0	250	0	0	0
Other Repair and Restoration	575	350	1,150	0	0	0
Silver Hill Facility						
MAJOR CAPITAL RENEWAL	0	0	0	0	0	0
Other Repair and Restoration	925	750	370	700	1,000	1,200
Smithsonian Astrophysical Observatory						
MAJOR CAPITAL RENEWAL	0	0	0	0	0	0
Other Repair and Restoration	530	675	400	550	1,360	575
Smithsonian Environmental Research Center						
MAJOR CAPITAL RENEWAL	0	0	0	0	0	0
Other Repair and Restoration	650	750	725	200	750	1,260
Smithsonian Institution Building (Castle)						
MAJOR CAPITAL RENEWAL	500	0	0	2,000	2,000	0
Other Repair and Restoration	495	50	50	50	50	50
Smithsonian Tropical Research Institute						
MAJOR CAPITAL RENEWAL	0	0	0	0	0	0
Other Repair and Restoration	1,005	880	2,370	960	1,215	725
Multiple Site Projects						
MAJOR CAPITAL RENEWAL	0	0	0	0	0	0
Other Repair and Restoration	7,510	7,960	6,765	7,360	7,360	7,110
Total Repair and Restoration						
MAJOR CAPITAL RENEWAL	24,205	34,280	37,695	42,320	31,705	33,475
Other Repair and Restoration	20,695	24,970	22,305	17,680	28,295	26,525
Total R&R	**44,900**	**59,250**	**60,000**	**60,000**	**60,000**	**60,000**
Total Alterations & Modifications	**3,000**	**2,950**	**5,000**	**6,000**	**6,000**	**6,000**
Grand Total, RR & A	**47,900**	**62,200**	**65,000**	**66,000**	**66,000**	**66,000**

Smithsonian Institution

Office of Physical Plant
Project Management Division

CURRENT CAPITAL PROJECT UPDATE January 2000

PROJECT NO.: 933108 / 933109
UNIT: National Museum of Natural History
PROJECT NAME: Master Plan – HVAC Renovation

CONSTRUCTION COST: $130 million construction budget
FUNDING SOURCES: Yearly Federal appropriation for construction

CONSTRUCTION START: 1990
CONSTRUCTION COMPLETE: 2012

DESCRIPTION: The Smithsonian Institution's National Museum of Natural History in Washington, DC, is an international center housing sixty million specimens in reference collections for use by resident and visiting researchers, in their study of the world and its inhabitants. In addition, the wide array of public exhibits attracts millions of visitors annually.

The building has many deficiencies in its envelope, mechanical equipment and controls, fire protection systems, and electrical systems resulting in the inability to maintain the proper environment conductive to the preservation of the Museum's collections and exhibits.

CURRENT STATUS: Since 1990, a new central utilities plant has been built beneath the east parking lot. This new plant services not only the circa 1910 and 1960 buildings, but also the new East and West infill buildings. Two exhibit halls have been renovated to provide swing space within the building for the temporary relocation of personnel and objects out of the construction areas. Major air handling equipment has recently been installed for the East Wing, and renovation of the 6th floor of the East Wing was finished last year. Construction is now underway for the 4th and 5th floors of the East Wing and major air handling equipment for the West Wing.

Smithsonian Institution

Office of Physical Plant
Project Management Division

CURRENT CAPITAL PROJECT UPDATE January 2000

PROJECT NO.: 943402
UNIT: **Patent Office Building**
PROJECT NAME: **Major Capital Renewal**

CONSTRUCTION COST: $110 – 120 million
FUNDING SOURCES: $60 million in annual RR&A appropriations
Remainder to be determined
CONSTRUCTION START: Summer 2000
CONSTRUCTION COMPLETE: Fall 2003

DESCRIPTION: Constructed between 1836 and 1868, the Patent Office Building houses the National Museum of American Art, the National Portrait Gallery, and the Archives of American Art in 332,000 square feet of space. The building was last renovated in the 1960s, and most of the existing mechanical and electrical systems are now over 30 years old. Other utility systems are seriously deteriorated as well, including electrical panel boards, switch gear and distribution networks, fire protection, plumbing, steam distribution, and communications systems. The building's elevators break down frequently, the window frames are deteriorated and failing, and interior surfaces in a number of areas have been severely damaged by water intrusion. The main entrances to the building and most restrooms are not accessible for persons with disabilities.

The Smithsonian plans a $60 million renewal program in the building that will replace the HVAC, electrical, plumbing, and other utilities systems, as well as upgrade fire protection and communications systems, replace the windows, restore the elevators, abate hazardous materials, and create accessible entrances and restrooms. Improving the building's functionality, enhancing space for public programs and education, and preserving the historical integrity of this landmark building are additional costs. Staff will be relocated to the recently acquired Victor Building.

CURRENT STATUS: The roof is currently being replaced with previously appropriated funds. The design of the renewal program is underway. The building closed to the public in January 2000, and the Smithsonian plans to begin vacating the building to allow construction to begin.

Smithsonian Institution

Office of Physical Plant
Project Management Division

CURRENT CAPITAL PROJECT UPDATE January 2000

PROJECT NO.: 973316
UNIT: **Arts and Industries Building (AIB)**
PROJECT NAME: **Master Plan Implementation**

CONSTRUCTION COST: $50 - 60 million construction budget
FUNDING SOURCES: Yearly Federal appropriation for design and construction

CONSTRUCTION START: Spring 2002
CONSTRUCTION COMPLETE: Spring 2005

DESCRIPTION: The building currently provides public exhibition space and office space for about twenty-three organizations. Most of the building systems are beyond there useful life. The project involves the renovation all major systems including mechanical, electrical, communication, fire safety, fire protection, accessibility for persons with disabilities and a service annex. The renovation will enhance the nineteenth century character of the building to meet the need of the new century. The mix of public and private space will be reprogrammed in an effort to restore the building to the original historical intent as a flexible facility for public programming.

CURRENT STATUS: The Architect –Engineer has been contracted to provide the pre-design services for the project. Most of these services have been completed which includes field survey, programmatic analysis and concept submissions. Schematics are expected to begin shortly which will complete the pre-design phase. The next phase is Design Development and Construction Documents and a contract will be negotiated with the A-E.

Smithsonian Institution

National Zoological Park
Office of Facilities Management and Construction

CURRENT CAPITAL PROJECT UPDATE

January 2000

PROJECT NO.: Multiple
UNIT: **National Zoological Park**
PROJECT NAME: **Major Capital Renewal Program**

CONSTRUCTION COST:	$13.7 million requested over five years $4.7 million other project costs (design, exhibit, etc.) requested over five years
FUNDING SOURCES:	$18.4 million Federal appropriation for planning, design and construction
CONSTRUCTION START:	October 2000 – Consolidated Maintenance Facility October 2000 – Mane Building Renovation October 2001 – Road and Bridge Repairs October 2002 – Bear Habitat Renovation (upper)
CONSTRUCTION COMPLETE:	October 2002 – Consolidated maintenance Facility April 2001 – Mane Building Renovation April 2002 – Road and Bridge Repairs April 2006 – Bear Habitat Renovation (upper)

DESCRIPTION: The Consolidated Maintenance Facility Project at Front Royal, Virginia replaces several badly deteriorated maintenance buildings with a single consolidated facility. Some of the existing buildings are in such bad condition that they are no longer safe for use.

A number of buildings at Rock Creek are currently below the acceptable performance level. As major components of the building systems age, the risk of operational failure, unscheduled closings, and danger to the animal collections and research efforts increases dramatically. Renovation of the Mane Building includes structural repairs and replacement of all major building systems, along with historic preservation and restoration of the original structure. The Australia Building renovation includes replacement of all major systems and structural repairs. The Bear Exhibit renovation includes improving animal containment and replacing all major systems and structures.

Roads and bridges are deteriorating due to heavy use. The Blue Road was replaced in 1998. Work on the North Road and bridge repairs to prevent deterioration will include replacing paving, stabilizing failed areas of pavement and reinforcing bridge structures.

CURRENT STATUS: Drawings and specifications are ready to bid for the Consolidated Maintenance Facility at Front Royal, Virginia. Concept design for the Mane Building is complete and award is being made for preparation of construction documents. Testing is on-going to determine the extent of structural repairs that will be required for the Australia Building. In house project planning is underway for Road and Bridge Repairs and for Bear Habitat Renovations.

Smithsonian Institution

Office of Physical Plant
Project Management Division

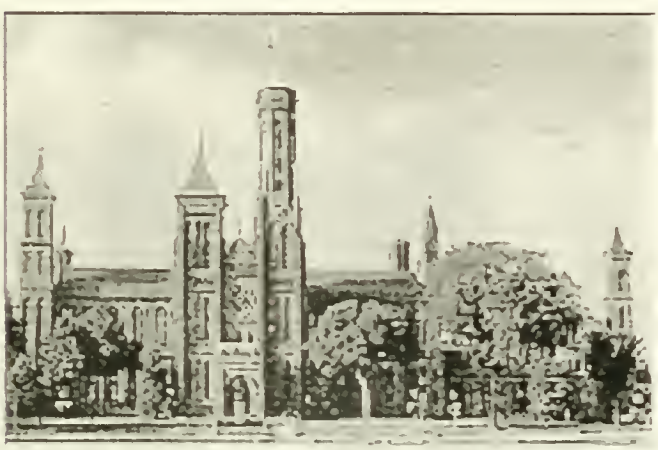
CURRENT CAPITAL PROJECT UPDATE January 2000

PROJECT NO.: 963207
UNIT: Smithsonian Institution Building (SIB)
PROJECT NAME: Master Plan Implementation

CONSTRUCTION COST: $35 – 50 million
FUNDING SOURCES: Yearly federal appropriation for design and construction
CONSTRUCTION START: Summer 2006
CONSTRUCTION COMPLETE: Summer 2009

DESCRIPTION: The building provides administrative offices, public space and food service. Most of the building systems are beyond their useful life. The project involves the renovation of all major systems including mechanical, electrical, communications, fire safety, fire protection, security and accessibility for persons with disabilities./ The renovation will enhance the nineteenth century character of the building to meet the need of the new century.

CURRENT STATUS: The Architect – Engineer has been selected and is currently developing a fee proposal to provide pre-design services for the project which will include field survey, programmatic analysis and concept submission.



Smithsonian Institution

Office of Physical Plant
Project Management Division

CURRENT CAPITAL PROJECT UPDATE January 2000

PROJECT NO.: 984604
UNIT: Anacostia Museum
PROJECT NAME: ADA and Life Safety Compliance

CONSTRUCTION COST: $6.9 million
FUNDING SOURCES: Repair, Restoration and Alterations of Facilities
CONSTRUCTION START: January 2000
CONSTRUCTION COMPLETE: May 2001

DESCRIPTION: The Anacostia Museum is currently under renovation to correct a number of life safety, security and ADA deficiencies, as well as replace the roof and failing mechanical and electrical systems. Access into the building will be improved, with modifications to the entrance and parking area to reduce the grade of slope that visitors who use wheelchairs must traverse. The inside of the building will be made fully accessible as well. The restrooms will be replaced with new fully accessible facilities, a new elevator will be installed, and emergency egress simplified with the addition of two new fire exit stairwells. A new wet pipe sprinkler system will be installed in conformance with the configuration of the building. The roof areas will be re-waterproofed, including new insulation, flashing, expansion joints, and in some instances, replacement of the underlying structure. The separate heating, ventilation and air conditioning (HVAC) systems, which were added over the years as the building expanded, will be replaced with a central, energy efficient system. Electrical service will be upgraded and replaced, with a new transformer, switchgear, emergency generator, distribution panels and wiring. A new lightning protection system will also be installed. Security will be upgraded by providing an appropriately sized and accessible office and control room, a staff entrance separated from the public, new wiring and detection devices and a relay panel connecting Anacostia to the NMAI Cultural Resources Center.

CURRENT STATUS: Construction began on January 10, 2000. The building has been closed to the public during construction, which will be complete in Spring 2001.

Smithsonian Institution

The National Museum of the American Indian
Design and Construction Office

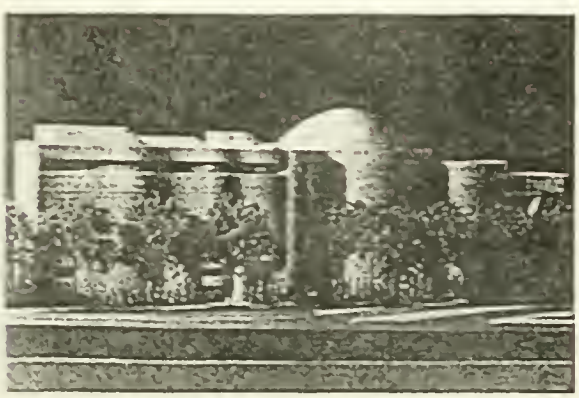
CURRENT CAPITAL PROJECT UPDATE

January 2000

PROJECT NO.:	**922307**
UNIT:	**National Museum of the American Indian (NMAI)**
PROJECT NAME:	**Mall Museum**
CONSTRUCTION COST:	$113 million (project budget $142 million)
FUNDING SOURCES:	$73.3 million Federal appropriation for design and construction $68.7 million capital fund-raising campaign ($36.7 million received)
CONSTRUCTION START:	Sitework, 1999; building, 2000
CONSTRUCTION COMPLETE:	Building open to public December 2002

DESCRIPTION: The project is located on the last available site on the National Mall at the foot of the Capitol directly across from the National Gallery of Art. The building will include about 250,000 square feet in four stories and a basement that include: exhibition galleries, a 300-seat theater, a 400-seat cafeteria, retail shop, conference center, resource center, a large central atrium for performances and other public events, museum offices and support spaces. To demonstrate the importance of the natural environment, a Native habitat surrounds the building, incorporating water features, Native plantings, a performance space, and an outdoor welcome area. All collection and curatorial spaces are located in Suitland, MD, to maximize public space on the National Mall.

CURRENT STATUS: Total project cost increase from $110 million to $142 million includes an additional $7.4 million in design costs due to restart and legal fees related to termination of original architects, schedule acceleration to regain lost time, redesign to correct deficiencies in inherited documents, additional consultants to analyze specific issues, and additional presentations to review boards. Construction cost increase of approximately $24.6 million is due to the complexity of curvilinear design and exterior skin construction, required increase in building height and basement floor area to correct headroom deficiencies and minimize differential settlement problems with the site, and increased contingency requirement to cover complex nature of the building. The Institution plans to raise the additional $32 million required to complete the building. The completion of construction documents is currently proceeding under the direction of the Smithsonian with the new team of architectural consultants, engineers, technical consultants, and Native designers. The Commission of Fine Arts and The National Capital Planning Commission have approved the project. Ground was broken on September 28, 1999. The construction fence, utility relocation and removal of existing sub grade structures has begun. Opening ceremonies are planned for December 2002.



Smithsonian Institution

National Zoological Park
Office of Facilities Management and Construction

CURRENT CAPITAL PROJECT UPDATE January 2000

PROJECT NO.:
UNIT: **National Zoological Park**
PROJECT NAME: **Water Exhibit**

CONSTRUCTION COST:	$2.8 million $1.1 million other project costs (design, exhibit, etc.)
FUNDING SOURCES:	$3.4 million Federal appropriation for planning, design and construction $0.5 million Non-Federal
CONSTRUCTION START:	Sitework – October 2000
CONSTRUCTION COMPLETE:	April 2001 Exhibit open to the public April 2001

DESCRIPTION: The function of this exhibit is to introduce the zoo visitor to the wonder and excitement of the water world – two thirds of the earth's habitats and the cradle of life. Water is a precious resource, it is the source of all life, and it is a threatened resource that we can protect. The project is located on a 3-acre site with existing ponds, adjacent to the lower entrance to the Zoo, near Rock Creek. The exhibit will be entered through a water feature that expresses the beauty and wonder of water. Upon entry, visitors will encounter two zones to the exhibit: a quiet contemplative area sited against the largest pond and an active area located between the ponds and the Mane Restaurant picnic area. The contemplative area will teach visitors about the earth as a "water planet," about water biology and about the role that water has played in civilization, including water in music and art. The active water play area will address watersheds, the water cycle and how people use water in agriculture, and to power our cities, and homes. Throughout the exhibit, are opportunities to connect with research and information from other parts of the Smithsonian.

CURRENT STATUS: A final concept design for the exhibit has been developed. Scopes of work for construction documents for landscape architecture and exhibit design are being finalized for contract negotiations starting October 1999. The scope of work for site sculpture design is being developed with award planned for Winter 2000.

Smithsonian Institution

Office of Physical Plant
Project Management Division

CURRENT CAPITAL PROJECT UPDATE January 2000

PROJECT NO.: 0083103
UNIT: Smithsonian Astrophysical Observatory
PROJECT NAME: Submillimeter Array Base Facility

CONSTRUCTION COST:	$4.2 million base building budget $800,000 other project costs (design, move-in, etc)
FUNDING SOURCES:	$500,000 non-Federal grant for planning & design $4.5 million Federal appropriation for construction, equipment & furnishings
CONSTRUCTION START:	May 2001
CONSTRUCTION COMPLETE:	July 2002

DESCRIPTION: The Submillimeter Array (SMA) is a major initiative by the Smithsonian to place an array of telescopes near the summit of Mauna Kea in Hawaii. The SMA will consist of eight antennas whose signals are combined to produce very finely detailed images. The operation of the instrument will be complex and will require the support of many scientists, engineers and technicians on a daily basis. . Because of the difficulty of working at elevation 14,000 feet-for both mental and physical activities-it is essential to have a base facility near sea level. Repairs, operations, development and much of the scientific data analysis will be done from the base facility with only a small crew traveling to the telescope on any given day. The facility will include about 16,000 useable square feet of electronics laboratories, office and support space. The building will be constructed near the base operations facilities of other telescopes in the University of Hawaii, Hilo Science Park. This location provides excellent access to the summit roads, communications hub, and to a larger scientific community with which to exchange ideas. The Smithsonian expects to have extremely important cooperative observing programs with two other radio telescopes with base facilities at the Science Park site, and this arrangement will contribute to attracting qualified personnel to what would otherwise be a remote and isolated work site. Our partners at the Academia Sinica's Institute of Astronomy and Astrophysics (ASIAA) have agreed to contribute design funding in FY 2000.

CURRENT STATUS: Base facility concept studies are currently underway. The full facility design will be complete and ready for contractor solicitations by October 2000.

Smithsonian Institution

Office of Physical Plant
Project Management Division

CURRENT CAPITAL PROJECT UPDATE January 2000

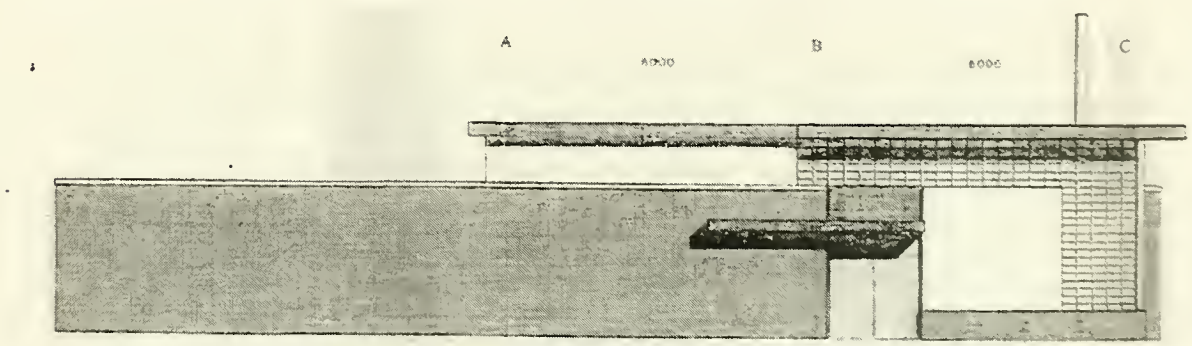
PROJECT NO.: **0082101**
UNIT: **Smithsonian Environmental Research Center**
PROJECT NAME: **Infrastructure Improvement**

CONSTRUCTION COST: $3.8 million base construction budget
$700,000 other project costs, planning and design
FUNDING SOURCES: $4.5 million-Federal appropriation for planning, design, construction, equipment & furnishings
CONSTRUCTION START: March 2002
CONSTRUCTION COMPLETE: March 2003

DESCRIPTION: Physical plant infrastructure includes those basic facilities, services and installations needed for the efficient functioning of the physical plant. This Infrastructure Improvement project addresses critical needs in the areas of energy efficiency, primary utilities, public access, and stormwater management.

A Central Utilities plant is planned as a key element of the infrastructure improvement project, to reduce annual utility costs and improve energy efficiency. This plant will help the SI meet the goal of 20 percent reduction in energy consumption by 2005, required by Executive Order 13123. The new central plant will provide heat and air conditioning to existing core facilities including the Mathias Laboratory building, the Conference/Dormitory building, Library, Maintenance Shop, and Administration building. These buildings currently operate with individual package units that are less efficient than a central plant. Incoming electric service will be upgraded to provide an efficient, reliable source of power to the plant and core facilities. A back-up water system is included in the project to assure adequate water quantities for fire protection and domestic use should the primary well system fail. Additionally the main entrance road will be rerouted directly to the Administration building. This will enhance public access, safety and security by keeping visitors away from the maintenance, utility, and laboratory facilities. Because Federal and State environmental legislation requires the implementation of management practices to control stormwater runoff generated by new construction such as the Utility Plant and access road re-alignment, stormwater management structures are included in this infrastructure project.

CURRENT STATUS: A preliminary concept study was completed in 1994, and cost savings were re-validated in 1999. This project is on hold until funds are approved to begin the design effort.



Elevation Concept for Proposed Central Utility Plant

Smithsonian Institution

Office of Physical Plant
Project Management Division

CURRENT CAPITAL PROJECT UPDATE

January 2000

PROJECT NO.: 955301
UNIT: National Air and Space Museum
PROJECT NAME: Dulles Center

CONSTRUCTION COST:	$145 to $158 million base building budget
	$34.0 million Virginia sitework budget
	$47 million other project costs (design, move-in, etc)
FUNDING SOURCES:	$8.0 million Federal appropriation for planning & design
	$6.0 million Virginia appropriation
	$6.0 million Virginia locality support
	$34.0 million Virginia contribution to infrastructure
	$7.0 million National Air and Space Society
	$130.0 million capital fund-raising campaign
	$35 to $50 million long term debt
CONSTRUCTION START:	Sitework – April 2000 / Building - January 2001
CONSTRUCTION COMPLETE:	January 2003
	Building open to the public December 2003
	Building move-in artifacts – summer 2002 thru fall 2006

DESCRIPTION: The project is located on a 176.5 acre site at the southeastern corner of the Dulles International Airport in Fairfax County, Virginia. The building occupies over 710,000 square feet of program area including: a single-story, arched main aviation hangar and separate space history hangar, both with mezzanines for multi-level viewing of the collections, an administrative and public amenity wing with food court, retail, large format theater, offices, and entry to an upper level restaurant and observation tower. The restoration hangar at the rear of the structure will be on view to the public through a glassed-in overlook. The study collection and archives areas adjacent to the restoration hangar are available to the public by appointment for research and storage.

CURRENT STATUS: The 100% construction documents for the sitework and the building (except for the Route 28 Interchange which must still go through a public hearing process) were finalized and submitted in March. The capital campaign has geared up and is meeting the established goals required to begin sitework construction in mid-2000. The building construction is scheduled to start in January 2001 and it is anticipated that this goal will be met. The Construction Manager for the project is presently reviewing the overall construction schedule phasing and sequencing to assure that the project can be completed and opened as planned in December 2003.